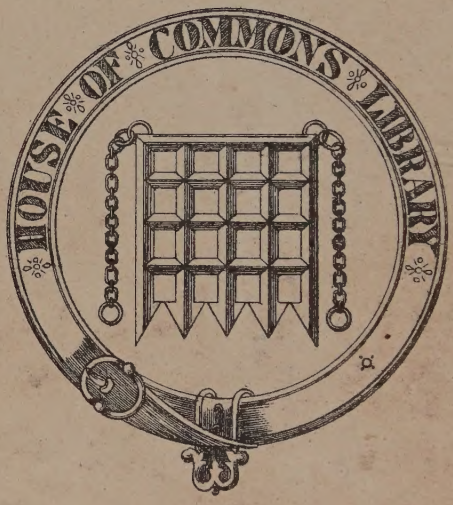

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INDUSTRIAL EFFICIENCY

A COMPARATIVE STUDY OF INDUSTRIAL LIFE IN ENGLAND, GERMANY AND AMERICA

BY

ARTHUR SHADWELL, M.A., M.D.

AUTHOR OF "DRINK, TEMPERANCE AND LEGISLATION"

IN TWO VOLUMES

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FACTORY LAWS.

THE regulation of factories by law rests on the broad principle that it is the right and duty of the State to restrict the freedom of individual action in the interests of the community. The principle is unassailable; it is the foundation of all law, and the only logical alternative is anarchy. Debate can therefore only arise upon the question of expediency. It has been held in the past, and is still nominally held by a few individuals, that all State interference in industrial matters is inexpedient, because it fetters free development under which things tend to "right themselves," if left alone, through the stress of competition. A manufacturer, for instance, who provides inferior conditions will be compelled to level up to the standard of his rivals, either because he cannot obtain hands to work under the conditions he provides or because their labour will be less efficient; and similarly with a nation. This is the argument of the survival of the fittest. Applied to trade and industry it is called "Manchesterism," but its only consistent supporters are the anarchists. Other nominal supporters only apply it so far as seems good to them; they draw an arbitrary line at a point which is usually determined by their own interest, though they like to refer it to some principle and to identify their own advantage with that of the community. As a matter of experience, it has

generally been found that the fittest do not survive, or that the provision of superior factory conditions does not constitute fitness in competing industries. The disadvantage under which humane employers are placed in competing with less scrupulous rivals was one of the arguments for State interference in the early days of English factory legislation, and the same thing may be seen to-day in the United States. The Southern States, which have no factory laws at all, and permit the employment of children under conditions forbidden elsewhere, are beating the New England States, in which more restriction is exercised. "In the long run," perhaps, this would not pay, and the law of survival would be vindicated; but the run is so very long that the public has no mind to wait for it, and not only sanctions, but demands, interference with practices which it believes to be injurious to the community.

It consequently happens that factory legislation always begins with the protection of the young, which is the most obviously expedient form of interference. The future of the race depends on their well-being, and they cannot protect themselves from injury; therefore, it is the clear duty of the State to protect them. It is curious that the need for protection was not recognised even in England, which led the way, until the rise of what is called the factory "system"—though it is not a system at all, but a spontaneous growth. Yet there is evidence that the conditions of child labour were worse under the previous "system" of home industries than in the factory. Nothing is more likely. Scores of writers have denounced, with tears of ink and blood, the horrors of the iniquitous factory "system," and have assumed or implied that until its appearance children lived a comparatively healthy and happy life at home. Singular delusion! If the children went

into the factory it was because the parents took them, as they do to-day in South Carolina and Georgia, and in the factory their taskmasters were chiefly their parents, who brought the children to assist them. At home they exacted the same service, with even less restraint or control, and the atmosphere of the hovels and cellars in which they lived was at least as bad as that of the more spacious factory, and probably much worse. The historical assumption of the superior conditions enjoyed by the working man in the ante-factory days, when he owned his own tools—which forms the preamble of the socialist position—crumbles away when the facts are examined. What the factory did was to concentrate the evils of child labour, bring them into the light and make them conspicuous. The importance of protecting the health of young workers was recognised in the north of England before the end of the eighteenth century. From the interesting researches into the beginnings of factory legislation by Miss Hutchins and Miss Harrison,[1] it appears that attention was first drawn to the subject by the occurrence of epidemic illness, the spread of which was attributed, no doubt rightly, to the aggregation of children in the mills under insanitary conditions; and general regulation by Act of Parliament was suggested. But the earliest legislation arose out of the Poor Law, and only affected those children for whom the State was responsible. In 1802 the "Health and Morals of Apprentices Act" was passed, by which the hours of working were limited to twelve, night work was gradually extinguished, and provision made for educating and clothing the apprentices.

That was the beginning of the factory laws. The

[1] *A History of Factory Legislation.* By B. L. Hutchins and A. Harrison.

general protection of children and limitation of the hours of their employment came many years later after much agitation. Subsequent legislation proceeded on the same principle, if in a blind fashion. It did not grant the demands of labour or of reformers, though influenced by them, but rather moved slowly from point to point as public opinion became convinced of the expediency of further measures. Women followed children as the next most obvious subjects of State solicitude in the interests of the community, and their protection entailed the general measure of fencing machinery. Then the special evils of some "dangerous trades" were brought forward, and finally general measures affecting health, the payment of wages and other matters were developed. Meantime the regulations for the protection of women and children were gradually strengthened, and provisions which originally applied to certain trades only were extended to others. So factory legislation was gradually evolved in this country. Others have followed and are still following the example; but coming later to the task, they have had at least the opportunity of approaching it in a more systematic fashion, and in some cases have done so.

The history of factory legislation, then, presents a gradually developed scheme of protection for workers, beginning with those least able to protect themselves and going on to others, at the same time increasing in stringency and particularity. It is also the history of a conflict waged between humanitarian impulses and commercial interests. The chief motive power which has pushed forward fresh measures and eventually secured their enactment has been sympathy with those to be protected, and it has been opposed and checked by the interests of those against whom protection was demanded. Not uniformly, for manu-

facturers are not devoid of humanitarian impulses, and many have anticipated and exceeded the provisions of the law from Robert Owen down to the owners of model establishments in the present day. But, generally, commercial interests have opposed the measures urged by humanitarian impulses and have often succeeded in modifying or nullifying them. The appeal has lain to the great public, which has been dimly guided on the whole by regard for its own interests, which are those of the community, in deciding the issue. The most weighty consideration in Europe has undoubtedly been the health and safety of the workers. Where this can be plainly shown to be at stake the appeal rarely fails, whereas demands by workers which are of the nature of class demands, seldom succeed. The argument that anything which tends to the well-being of a large section of the population must benefit the whole community seems so self-evident that it is seldom formulated, and that the factory laws have contributed to the health and well-being of the workers cannot be denied. The conditions under which work is carried on have been revolutionised. Yet, by the irony of history, it is to-day, after sixty years or more of progressive improvement in the direction of health, that physical *deterioration* among the industrial population has become a burning question. Truly we see in a glass darkly.

The argument from health has occasionally been enforced by reference to industrial efficiency. It has been argued that good conditions of working promote good work; and some employers have acted on it by voluntarily shortening hours, and by other measures for lightening the toil or increasing the comfort of the employed. The results have justified their action, and I believe that, broadly, better conditions do tend to better work, and may be

said to pay. But no absolute rule can be laid down. Industrial efficiency is not identical with commercial success, and economy effected by working longer hours, employing cheaper labour and providing inferior conditions may give an immediate advantage in some industries. This is, in fact, the argument for enforcing uniform conditions by legislation, and shutting off the downward tendency of competition, as against Manchesterism. Hence the constant demand for further regulations. "Sweating," it appears, pays well enough to be contagious, and it flourishes wherever allowed, forcing the standard down by competition. This fact, which is the strong point in the case for State interference and for a "common rule" fixing a minimum standard, implies that the provision of superior conditions, though it may tend to industrial efficiency, does or may involve some commercial disadvantage. That is equalised, of course, when all are brought under the same regulation; but each nation can only legislate for itself, and therefore the very argument for State interference at home is an argument for taking account of conditions prevailing elsewhere. Existing circumstances emphasise this consideration. As international competition becomes closer, the effect of unequal conditions tells more plainly, and that of unequal factory laws may prove a serious factor in determining commercial success or failure. The State has to decide what is best for the community at large, and must take cognisance of such conditions. It cannot assume, with one school, that restriction is absolutely good, and that the more there is of it the better; nor can it assume the contrary with another school. It has to strike a balance between conflicting interests and decide, for instance, whether the advantages of protecting a particular class outweigh the disadvantages of discouraging industrial enterprise or not.

The more consciously and with the fuller knowledge it performs the task, the more likely it is to succeed.

With these preliminary considerations in mind, we can proceed to examine the existing regulations in England, Germany and certain American States, and to estimate their bearing on the industrial situation. For this purpose it will be necessary to give a brief summary of the main provisions in each country relating to factories or workshops. Those dealing with mines, quarries, docks, etc., are omitted as outside the scope of the inquiry.

England.

Protected Persons.

Children.—The employment of children under twelve years of age is forbidden. Children between twelve and fourteen years may only be employed for half the day, in "morning and afternoon sets," or on alternate days if employed both morning and afternoon. This is to enable them to attend school, as required by the Education Acts. The hours are also regulated. They vary slightly in "textile" and "non-textile" factories, but in any case they lie between 6 A.M. and 8 P.M., which precludes night work. Continuous employment, without an interval of at least half an hour for a meal, must not exceed $4\frac{1}{2}$ hours in a textile factory or 5 hours in a non-textile one. It is not clear from the complicated wording of the Act what the actual hours of work amount to, but apparently they are intended not to exceed $5\frac{1}{2}$ a day in textile factories, and 6 a day in others. These regulations, with some minor ones, apply to children between twelve and fourteen years of age, who are technically termed "children"; but a child who has reached the age of thirteen may obtain a certificate of educational proficiency or of school attendance, accord-

ing to a standard fixed by the Home Office, and is then considered a "young person," and exempt from the restrictions imposed on the employment of "children". Other children become "young persons" on reaching the age of fourteen. Neither "children" nor "young persons" under sixteen years of age may be employed for more than a week (extended to thirteen days in some circumstances) without a certificate of fitness granted, on personal examination, by a certifying surgeon, to the effect that the person named is of the specified age and not incapacitated by disease or bodily infirmity from working under the legal conditions. Parents are expressly made responsible for the attendance at school of children employed in factories or workshops; one attendance a day is compulsory for those employed in morning or afternoon sets and two attendances for those employed on alternate days. Children must not be allowed to clean any machinery in motion, or any place under machinery, except overhead mill-gearing. Children may not be employed where dry-grinding of metals or the dipping of lucifer matches is carried on. These are the chief provisions for the special protection of children under the Act of 1901; but there are some others which apply to them in common with young persons and women.

The number of "children" under fourteen examined for employment in the United Kingdom in 1902 was 43,293; in 1897 it was 85,491.

Young persons are those from fourteen (or thirteen, with a special educational certificate) to eighteen years of age. For the most part the provisions for their protection are the same as for women, but there are a few special ones and some exceptions applying to them. As already stated, those under sixteen years of age are subject to the certificate of fitness required for children; and further, a fac-

tory inspector has the power of ordering discontinuance of employment in the case of a child or young person under sixteen on account of incapacity through disease or bodily infirmity. Young persons and children may not be employed where the silvering of mirrors or the process of making white lead is carried on. A similar prohibition with regard to the melting and annealing of glass applies to female young persons and children. The number of "young persons" examined for employment in 1902 was—thirteen to fourteen years, 89,137 ; fourteen to sixteen years, 248,637.

Women.—A woman or girl may not be employed within four weeks of her confinement. The hours of employment are thus regulated for women and young persons: (1) In textile factories—on ordinary week days, from 6 to 6 or from 7 to 7, with not less than 2 hours for meals; on Saturday, from 6 to 12 (if a whole hour allowed for meals), from 6 to 11.30 (if less than an hour allowed), or from 7 to 12·30; that is for manufacturing processes; employment may be extended for an extra half-hour on Saturday for other purposes, which means cleaning-up. (2) In non-textile factories or workshops—on ordinary week days, from 6 to 6 or 7 to 7 or 8 to 8, with not less than 1½ hours for meals; on Saturday, from 6 to 2 or 7 to 3 or 8 to 4, with not less than half an hour for meals. In textile factories employment must not be continuous for more than 4½ hours, and in non-textile ones for more than 5 hours without at least half an hour's interval for meals.

These provisions are of great importance in competing industries. They practically limit the working week in all textile manufactures to 55 hours. There is no such limit in other countries, except in the state of New Jersey, and there it is not observed (see p. 45). Textile factories are

any premises where mechanical power is employed in any process for the manufacture of "cotton, wool, hair, silk, flax, hemp, jute, tow, china-grass, cocoanut fibre or other like material". "Non-textile factories" are all other premises where mechanical power is employed in manufacture. Printing, bleaching and dyeing works count as textile factories with regard to hours, except that continuous employment may be for 5 instead of $4\frac{1}{2}$ hours.

Women, young persons and children may not be employed on Sunday; and must have the following whole holidays allowed: Christmas Day, Good Friday and every Bank holiday (Easter Monday, Whit Monday, the first Monday in August, and the day after Christmas Day). They must have the times allowed for meals at the same hour, must not be employed during those hours or allowed to remain in a room where a manufacturing process or handicraft is being carried on. They are further specially forbidden to take meals or to remain during meal-times in glass-works where mixing of materials, grinding, cutting or polishing is carried on, in lucifer match works, and in the dipping-house, drying-room or scouring-room of earthenware works. They must not be employed in wet-spinning rooms unless they are efficiently protected from being wetted. Girls under sixteen may not be employed where the making of bricks and tiles (other than ornamental) and the making or finishing of salt is carried on. Young persons must not be allowed to clean dangerous machinery in motion, and women are subject to a certain amount of prohibition as to cleaning machinery.

The foregoing are the principal provisions for the protection of women and young persons. They are subject to certain exceptions. Continuous employment for 5 hours is allowed in winter and under conditions in elastic web,

ribbon and trimming works, and the exceptions may be extended by the Home Office to other textile factories. Women are allowed, by special order, to work overtime under certain conditions in non-textile factories and workshops on the ground of press of work or the perishable nature of the materials; the total number of hours in a day allowed under an overtime order must not exceed twelve, and the period extends in no case later than 9 P.M.; overtime may not be worked more than three days in the week, or more than thirty days (on account of press of work) or fifty days (on account of perishable articles) in the year. Women, young persons and children may be employed for an extra half-hour on any day except Saturday, on account of an uncompleted process in bleaching and dyeing works, print works, also in iron mills, foundries and paper-mills in which male young persons are not employed during any part of the night; but the total number of hours in the week must not exceed those already laid down. Permission for similar overtime may be granted by special order to other factories. In certain trades the regulations regarding hours and meals are relaxed for boys (male young persons) above fourteen or sixteen years of age.

General Provisions.

Health is safeguarded by the following sanitary provisions, which apply to every factory except a "domestic" factory:—

(*a*) It must be kept in a cleanly state;

(*b*) It must be kept free from effluvia arising from any drain, water closet, earth closet, privy, urinal, or other nuisance;

(*c*) It must not be so over-crowded while work is carried on therein as to be dangerous or injurious to the health of the persons employed therein;

(*d*) It must be ventilated in such a manner as to render harmless, so far as is practicable, all the gases, vapours, dust or other impurities gener-

ated in the course of the manufacturing process or handicraft carried on therein, that may be injurious to health.

These general provisions are filled out by explicit rules.

To secure cleanliness all premises must be lime-washed or (if painted or varnished) washed with hot water and soap every fourteen months.

To secure freedom from insanitary effluvia the provisions of the Public Health Act of 1875 apply to factories, which may be proceeded against as a nuisance by the local health authority.

A standard of overcrowding is laid down in cubic space, namely, 250 cubic feet to every person, which is raised to 400 cubic feet during overtime. These standards may be raised by special order where artificial light is used other than electric or premises are used as a sleeping apartment. If the local authority fails to enforce the law relating to public health a factory inspector may be authorised to serve notice on the local council to do its duty, and in default may take proceedings himself and recover costs from the local council.

"Adequate measures must be taken for securing and maintaining a reasonable temperature in each room in which any person is employed," and the use of thermometers may be made compulsory by special order.

With regard to ventilation, a standard may be prescribed by special order for any class of factory.

Where floors are liable to be wetted "adequate means shall be provided for draining off the wet". "Every factory and workshop must be provided with sufficient and suitable accommodation in the way of sanitary conveniences," and with "proper separate accommodation for persons of each sex". What constitutes "sufficient and suitable" is laid down by special order.

Safety.—The regulations for securing safety are still more detailed than those relating to health. The following rules are laid down for the fencing of machinery :—

(*a*) Every hoist or teagle and every fly wheel directly connected with the steam or water or other mechanical power, whether in the engine house or not, and every part of any water wheel or engine worked by any such power, must be securely fenced ; and

(*b*) Every wheel-race not otherwise secured must be securely fenced close to the edge of the wheel-race ; and

(*c*) All dangerous parts of the machinery, and every part of the mill gearing, must either be securely fenced, or be in such position or of such construction as to be equally safe to every person employed or working in the factory as it would be if it were securely fenced ; and

(*d*) All fencing must be constantly maintained in an efficient state while the parts required to be fenced are in motion, except where they are under repair or under examination in connection with repair, or are necessarily exposed for the purpose of cleaning or lubricating or for altering the gearing or arrangements of the parts of the machine.

Equally minute regulations are laid down with regard to steam boilers, self-acting machines, means of escape in case of fire, and doors. The means of escape from fire comes under the jurisdiction of the local authority. The use of dangerous machines and unhealthy or dangerous factories may be prohibited by an order of the justices on the complaint of an inspector.

Accidents must be reported forthwith to the inspector or the certifying surgeon, who must at once make an investigation. The Home Secretary has power to order a formal investigation when he thinks fit, and the persons appointed to hold it have the same powers as a court of law.

Notices.—No permission is required for starting a factory, but notice must be served on the district inspector within one month of occupation, giving name, address, nature of work and particulars of power employed.

In factories in which the hours and meal-times are regulated by law—that is, factories in which women, young

persons or children are employed—a notice must be affixed specifying the hours of work, the times allowed for meals and whether the children are employed in morning and afternoon sets or on alternate days. In all factories the following must be affixed, "in such positions as to be easily read": an abstract of the Factory Act of 1901, name and address of the district inspector, also of the certifying surgeon, and a notice of the clock by which the time is kept.

In textile factories particulars of rates of wages paid for piece-work, and methods of computation, are to be posted up in an accessible position in addition to being delivered in writing to workers, and the same provision may be extended to other factories by special order.

In all factories a general register must be kept, containing particulars of children and young persons employed, lime-washing, accidents and special exceptions; and the register is open to inspection by the certifying surgeon. Particulars out of it may be demanded by an inspector. Further, returns stating numbers employed, age, sex and occupation must be furnished periodically to the chief inspector.

Dangerous Trades—Notification.—Every medical practitioner is bound to notify to the factory department of the Home Office all cases of poisoning by lead, phosphorus, arsenic or mercury, and of anthrax, contracted in any factory, and occurring in his practice. Notice of similar cases must be sent from the factory to the district inspector and certifying surgeon.

Ventilation by Fan.—This provision is so important that it must be quoted in full:—

> If in a factory or workshop where grinding, glazing or polishing on a wheel, or any process is carried on by which dust or any gas, vapour or other impurity is generated and inhaled by the workers to an injurious extent, it appears to an inspector that such inhalation could be, to a great

extent, prevented by the use of a fan or other mechanical means, the inspector may direct that a fan or other mechanical means of a proper construction for preventing such inhalation be provided within a reasonable time.

Lavatories and Meals.—Where lead, arsenic or "any other poisonous substance" is used, "suitable washing conveniences" must be provided. Where the work gives rise to poisonous dust or fumes of the kind just quoted, it is forbidden to take meals or to remain during meal-times in a room so affected.

The provisions for protecting women, young persons and children in dangerous trades have been already mentioned.

Special Rules.—These form a very important branch of factory legislation. The section giving power to make special regulations runs as follows:—

Where the Secretary of State is satisfied that any manufacture, machinery, plant, process or description of manual labour, used in factories or workshops, is dangerous or injurious to health or dangerous to limb, either generally or in the case of women, children, or any other class of persons, he may certify that manufacture, machinery, plant, process or description of manual labour to be dangerous; and thereupon the Secretary of State may, subject to the provisions of this Act, make such regulations as appear to him to be reasonably practicable, and to meet the necessity of the case.

The Act provides that notice of any proposed regulations must be given to the persons affected, who may formulate objections in writing. The Secretary of State "shall consider" any objection so made, and he "may, if he thinks fit, amend the draft regulations"; the amended draft to be dealt with in the same manner. If he does not amend or withdraw the draft regulation to which objection is made (unless it appears to him frivolous), he "shall, before making the regulations, direct an inquiry to be made". The inquiry is to be held in public, persons affected may appear in person or by counsel and witnesses may be

examined on oath. Further, regulations so made must be laid before Parliament for forty days, and if either House resolves that they ought to be annulled, they are of no effect. Power is given by means of such regulations—

(*a*) To prohibit the employment of, or modify or limit the period of employment of, all persons or any class of persons in any manufacture, machinery, plant, process or description of manual labour certified to be dangerous; and

(*b*) To prohibit, limit or control the use of any material or process; and

(*c*) To modify or extend any special regulations for any class of factories or workshops.

These regulations are commonly called "special rules," and copies of any in force must be posted up where they can be easily read in any factories to which they apply. They are binding, under a penalty, both on employers and on employed.

The procedure quoted above is new since 1901. Previously by the Act of 1891 provision was made, in case of objection, for arbitration between the Home Office and the objectors, and workmen might be represented. Under this law special rules were made for twenty-three industries between 1892 and 1902, and arbitration took place in three cases. The last case was that of the pottery trade, which has been more regulated than any other, having been the subject of special rules in 1894, May, 1898, October, 1898, and 1901.

The industries at present regulated by special rules are —white lead, red and orange lead, yellow lead, lead smelting, paints and colours, and the extraction of arsenic, brass mixing and casting, enamelling of iron plates, enamelling of iron hollow ware, tinning and enamelling of hollow metal ware and cooking utensils, earthenware and china, transfer-making for earthenware and china (a colour process), explosives in which dinitrobenzole is used, chemicals, bichromate or chromate of potassium or sodium, flax-spin-

ning and weaving, processes involving yellow chromate of lead, lucifer matches, vulcanising of india-rubber, electric accumulators, aerated waters, wool sorting, wool combing, dry hides and skins.

In addition to the foregoing list of specially regulated industries, separate provision is made by the law for tenement factories, cotton-cloth factories, bakehouses and laundries. The Cotton Cloth Factory Act, incorporated in the general act of 1901, is the most remarkable of these enactments. It lays down the most minute regulations with regard to the amount of humidity allowed in the air and the means of registering it, the source of the water used for humidification, the pipes used for the introduction of steam, the amount of ventilation, the outside of the roof and the provision of cloak-rooms. The clause relating to ventilation lays down the following standard of atmospheric purity: "During working hours in no part of the cotton cloth factory shall the proportion of carbonic acid (carbon dioxide) in the air be greater than nine volumes of carbonic acid to every 10,000 volumes of air".

Compensation for injury is regulated by separate laws, and will be discussed in a subsequent chapter.

Payment of Wages.

Truck is forbidden; wages must be paid in currency, and deductions are only allowed under specified conditions. They must be in accordance with a contract, must be reasonable, must not represent any profit to the employer, and particulars must be given in writing to the workman. Under these conditions deductions are allowed for fines, bad work and damaged goods, materials, machines and other things provided by an employer. Fines may only be imposed in respect of acts or omissions which cause, or are

likely to cause, loss or damage; they must be "fair and reasonable, having regard to all the circumstances of the case"; must not exceed the amount of damage caused; terms of the contract regarding fines must be posted up unless each contract is signed by the workmen; a register of deductions must be kept, in which particulars of fines are entered. Wages must not be paid in public-houses.

Inspection.

The administration of the law, except in so far as the local authority has jurisdiction in relation to public health and means of escape from fire, is entrusted to Government inspectors attached to the Factory Department of the Home Office. Their immediate superior is the Chief Inspector, who is responsible to the Home Secretary. The majority are locally stationed in charge of districts, but some having special duties are attached to the central office, and among the latter are eight female inspectors. The duty of the inspectors is to see that the law is carried out, and for that purpose they have power to enter factories and schools, to examine persons, registers, notices, etc. The number of inspectors and assistants for the United Kingdom (with a total of 252,853 "registered works," including 98,322 factories, and 140,710 workshops) in 1902 was 158. Out of this number there were five superintending inspectors having general functions, one specially concerned with dangerous trades, one medical inspector, one engineering adviser, one electrical inspector, one inspector of humid textile factories, eight "lady inspectors," and six inspectors of textile particulars. The cases of prosecution for violation of the law numbered 3,426, of which fifty-nine were dismissed; the total amount of fines inflicted and costs was £4,219. About two-thirds of the cases had reference to the employment of

protected persons, and were almost entirely concerned with illegal hours and with certificates of fitness.

Certifying surgeons are medical practitioners residing in the locality. Their duties are to examine for fitness of employment and for trade poisoning, to investigate and report on accidents. They numbered 1,986 in 1902.

Penalties.

Infringement of the factory laws is punishable by fine ; the maximum amount ranges from £1 to £10, according to the gravity of the offence. In case of death or injury arising from violation of the law, a fine up to £100 may be imposed. As a rule the person held responsible is the "occupier," but it is open to the occupier to prove that some other person was responsible for an offence charged, and, in respect of certain provisions, the "owner" is distinguished from the occupier. The "employer" does not appear to be recognised as such. The law, therefore, is strictly factory law, and takes the premises as the basis of its operation.

Germany.

The German factory laws form part of a systematic code for the regulation of industries, and are quite comparable with the English, though there are considerable differences between them. The word "*Fabrik*" is not defined, but it corresponds closely enough to "factory" for our purpose.

Protected Persons.

Children.—Children may not be employed under the age of thirteen, and only at that age if they are no longer liable to attend school, a condition which is decided by the school

inspector. For such children—that is, from thirteen to fourteen years old—the hours are limited to 6 a day, with half an hour's interval for meals. In 1901 the total number of children under fourteen employed throughout the Empire in *Fabriken*, which includes somewhat more than factories in the English sense, was 9,454 (5,876 boys and 3,578 girls). Of these, 25·3 per cent. were employed in textiles, and this industry accounted for nearly half the girls; 16·3 per cent. (mostly boys) in the "stones and earth" industry; 15·1 per cent. in the industry of "food and drink"; 11·5 per cent. (chiefly boys) in the metal trades; 7·3 per cent. (chiefly boys) in wood; 6·9 per cent. (nearly all boys) in machinery. In the other trades the numbers were very small. The home employment of younger children was brought under regulation by an Act passed in 1903, but the details do not concern us. The German educational system does not recognise "half-timers," but, as a matter of fact, all the schooling required by law in lower grade primary schools is often given in the morning, leaving the afternoons free, and both boys and girls of school age are employed in the afternoons, the former generally as errand boys, the latter as nurses.

Young Persons.—After fourteen children are exempt from school, except in so far as boys may be liable to attend continuation classes for a few hours a week in those places where continuation schools are compulsory. At fourteen, therefore, boys and girls may and do go into the factory in large numbers; but up to sixteen they are called "young persons" or (together with those under fourteen) "youthful workers," and are subject to special regulations. The number of "young persons" employed in 1901 was 335,912. They may not be employed for more than 10 hours a day, nor on Sunday and holidays, nor during the

hours appointed for religious instruction, for confirmation, confession and communion, nor in certain specified trades; their working day must not begin earlier than 5.30 A.M. nor continue later than 8.30 P.M.; they must have an hour's pause at midday and half an hour both in the forenoon and afternoon, unless their working day is not more than 8 hours and no continuous spell exceeds 4 hours; during the pauses any participation in the work of the factory is forbidden, and even to remain in the rooms is only allowed when their own department of the work is brought to a complete standstill or it is impossible for them to go elsewhere. These regulations apply to both girls and boys under sixteen; after that they cease to be "youthful workers". After eighteen boys, other than regular apprentices, are under no special protection, except that all minors (under twenty-one) must be provided with a "work book" or register containing name, age, birthplace, nature of employment, date of engagement, discharge and other particulars. In some employments wage books may also be made compulsory; details of wages and other conditions are entered in these books. In some parts of Germany attendance at continuation schools is compulsory from fourteen to sixteen, seventeen or eighteen years of age; employers must grant leave of absence for the required school hours to boys so liable.

Women.—Female hands must not be employed between 8.30 P.M. and 5.30 A.M.; on Saturday and on the eve of a holy day they must not be employed after 5.30 P.M. Their daily hours of employment must not exceed 11 on ordinary days or 10 on Saturday and on the eve of a holy day. They must have at least an hour's pause at midday, and those who have a household to look after may claim an extra half-hour. Employment is forbidden to mothers for

four weeks after confinement, and for a further fortnight unless they have a doctor's certificate. The number of women over sixteen employed in 1901 was 847,386, of whom 310,211 were under twenty-one.

Wherever women and youthful workers are employed in a factory the employer must give written notice to the police, stating the nature of the employment and the hours of work.

The foregoing regulations are of general application. There are, in addition, special rules for the protection of women and youthful workers in the following manufactures: Matches, lead, horse-hair, brushes, cigars, accumulators, zinc, glass, rubber, spinning and some preparatory textile processes, basic slag, preserves, chicory, sugar, milk, metal rolling and forging, and pottery.

Overtime is allowed under press of work to women over sixteen—namely till 10 P.M. on ordinary week days, but not to exceed 13 hours a day, and only for forty days in the year. In certain occupations those who have no household duties may work overtime on Saturday to 8 P.M.

General Regulations.

Holidays.—The following holidays are secured: Sunday, New Year's Day, Easter Monday, Ascension Day, Whit Monday, Repentance Day (middle of November), Christmas Day, and the day after. Good Friday is also generally observed; and in places where the population is preponderatingly Catholic, as in the Rhine Province, several additional holidays are kept on important Church festivals. The statutory time allowed on these holidays is—each Sunday and festival day not less than twenty-four hours; if two come consecutively, thirty-six hours; Christmas, Easter and Whitsuntide, forty-eight hours; the time is

reckoned from twelve o'clock midnight. It appears, therefore, that factory hands are fairly well off for holidays.

Wages.—Truck is forbidden, wages must be paid in currency, and not on Sunday. Fines are permitted, but must not exceed half the average earnings, except in case of acts against fellow-workmen, of offences against morality, or against regulations for the maintenance of order and of security, and for the fulfilment of statutory provisions. In these cases fines may be imposed to the full extent of the average earnings. All fines must be applied to the benefit of the factory workers, and generally go to the sick fund; but this does not affect the right of the employer to obtain compensation for damage. Particulars of fines must be entered in a book, which is open to inspection by a Government officer.

Factory Rules.—Every factory must have a set of rules hung up in an accessible place in each department, stating the hours of work, with the regular intervals for meals, the time and manner of paying wages, the length of notice required for terminating employment and the conditions which render notice unnecessary, and particulars of punishments, including fines, and the objects to which they will be applied. Punishments which wound self-respect or offend against morality are inadmissible. The factory rules are legally binding on employer and employed; but before they are issued opportunity must be given to adult workers to express their views; and the rules, with any written objections, must be submitted within three days of issue to the factory inspector, who may order amendments if the rules are not in accordance with the law or with special regulations. Punishments not in the rules cannot be imposed, nor can other grounds of dismissal be included in the contract.

Notice of termination of employment is usually a fortnight; but it may be dispensed with on the part of an employer on the following grounds: false representations, theft and other criminal acts, leaving work without permission or refusing to fulfil the contract, carrying fire or lights about contrary to orders, acts of violence or gross abuse directed against employer, his representative or family, wilful damage, inducing members of employer's family or his representative or fellow-workers to behave in a manner contrary to law or morality, inability to continue work, or an alarming disease. Similarly it may be dispensed with by workers on corresponding grounds, and also for non-payment of wages in the prescribed manner, neglect to provide sufficient work for piece-workers, unjustifiable prejudice, danger to life and health in the employment which could not be inferred from the contract.

The provision of factory rules containing the foregoing and other particulars, legally binding on employers and employed, is a characteristically German institution. It is in accordance with that respect for law and order which is such a marked feature of German life, and contributes materially, I have no doubt, to the smooth working of the establishment. The relations, rights and obligations of work-giver and work-taker—to use the excellent German terms—are publicly defined and guaranteed by the law. This conduces to tranquillity, and renders vague talk about "rights" palpably futile. The law cannot be changed by individual bullying on either side. The rate of wages is not included in the factory rules.

Factory Premises.

Before any standing industry can be started it is necessary to give notice to the local authority; and special

permission is required for certain concerns which may give rise to a public nuisance or danger. These include the manufacture of explosives, gas, petroleum, coke, coal-tar bricks, chemicals of all kinds, soap, cellulose and the like and a number of other establishments, such as blast furnaces, foundries, forges, tinning and galvanising works. Similar permission is required for the erection of boilers, and specially noisy works may be forbidden near churches, public buildings and hospitals.

Health and Safety.—Apart from these particular provisions, factories are subject to the following general law :—

> Owners are bound to arrange and maintain work-rooms, appliances, machinery and tools, and to regulate the working in such a way as to protect the workers from dangers to life and health so far as the nature of the business allows.
>
> In particular, attention must be paid to the provision of sufficient light, ample air space and ventilation, and to the removal of dust arising from the work, of vapours and gases thereby developed, and of refuse incidental to it.
>
> Similarly, those arrangements must be provided which are necessary for the protection of workers against dangerous contact with machinery or parts of machinery, or against other dangers lying in the nature of the work-place or the working, and particularly against the dangers which might arise from fire.
>
> Finally, such rules must be issued with regard to the regulation of the business and the conduct of the workers as are called for to secure freedom from danger.

This section is followed by a similar one in general terms requiring the provision of arrangements for the preservation of morality and decency. It mentions the separation of the sexes, particularly in reference to washing and cloak-rooms, and lays stress on the provision of adequate sanitary conveniences.

Further, in places where persons under eighteen are employed, employers are bound to make such special arrangements with regard to health and morality as their age requires.

Those general provisions of the law may be amplified by the local factory authority, which has power to order specific measures for their fulfilment in the case of individual factories.

Dangerous Trades.

Special regulations for the efficient enforcement of the foregoing general ones may be issued for particular industries by the Bundesrath (Federal Council of the Empire) or by the separate Governments or by the police. A number of trades have been so regulated, largely in the interests of women and youthful workers, as already detailed. The trades specially regulated on general grounds are (1) for the Empire—flour mills, match factories, bakeries, cigar factories, printing works and type-foundries, zinc works, lead, colour and sugar of lead works, accumulators of lead and lead compounds, bichromates, basic slag mills, horse-hair spinning, bristle and hair dressing, brush making; (2) for Prussia only—spinning, mirror silvering, water and half-water gas, electrical installations, hare fur dressing, lead works; for Bavaria—mirror silvering; for Saxony—lifts and lead; for Württemberg—tanning. There is no system of notifying cases of trade poisoning or disease. Compensation for injury will be discussed under the heading of Insurance.

Inspection.

The supervision of factories is entrusted to special inspectors, as in England. They are locally distributed in industrial districts, and reside near their work. It is their duty to visit factories and see that the provisions of the law are carried out. Factories in which women and youthful workers are employed must, in Prussia, be visited once every six months. A few female inspectors have been

appointed in recent years for certain localities. The immediate superiors of the inspectors are special councillors attached to the provincial Government offices. The official head of the department for the empire is the German Minister of the Interior; for Prussia it is the Minister of Commerce. The administration of the law, however, is mainly in the hands of the police or local executive, which has large powers.

Penalties.

The penalties for infringement are fines similar in amount to those in England. They range from £1 to £100. In the case of graver offences imprisonment up to six months may be imposed in default of payment. The person held responsible is usually called the "undertaker," but sometimes the term "work-giver," which is the ordinary German equivalent of "employer," is used. The legislature has primarily regard to the carrying on of a business, that is to say, to the dynamic rather than the static conditions, as in England.

The foregoing summaries show the general likeness between the English and German codes, and also bring out some of the points of difference.

The first to be noticed is the age limit for children, which is one year later in Germany, namely thirteen instead of twelve. The number of children employed under fourteen is consequently very much greater in England than in Germany, and this constitutes an advantage to employers in two ways—economy in wages and superior skill in manual manipulation acquired by beginning at an early age. The undoubtedly superior skill of English operatives in some textile processes is chiefly due to their having begun younger and indeed at an age earlier than the present law permits.

On the other hand, the provisions for the protection of children and those for "young persons" and women are more stringent and complete in England. There is, first, the examination for fitness of employment applied to those under sixteen; then the age of protection for young persons extends to eighteen instead of sixteen. Further, the hours are shorter; the legal day's work begins half an hour later and ends half an hour earlier; the hours for women on ordinary week-days are confined, in textile factories, to 10 instead of 11, and on Saturday to $5\frac{1}{2}$ instead of 10. The universal half-holiday on Saturday in England is a very important institution. It is a great boon to the work-people and is not grudged by employers, but it certainly prevents them from running their machinery so long as their competitors; and they have found the curtailment of an hour, effected by the latest legislation, a costly restriction. The regulations for women and young persons in dangerous trades are also more stringent in England. The only points in which German law imposes greater restrictions are in regard to confinements and evening continuation schools.

With regard to general provisions, the English law is also considerably more stringent, save on two or three points. These are that no permission is required to start a factory, that the statutory provision for holidays does not apply to adult males, and that "factory rules" are not imposed, though some of the notices required to be posted up are of the same nature. In almost all other respects the English law is both more detailed and more extended in its operation. The difference is curious, and reverses the usual order of things. Germany is pre-eminently the country of the martinet; stricter rules are laid down for the ordering of life, both in public and in private, than

elsewhere. There is truth in the common criticism that people are more "policed" and "dragooned" there, though the working is less irksome in actual life than is commonly supposed. In England, on the contrary, there is in general less interference and more freedom of action under the law than in any other ordered community. But in regard to factory legislation the position is reversed. The English provisions are more minute, more rigid and more precise than elsewhere. The German law, while keeping the same objects in view—and indeed more fully, by the inclusion, for instance, of good light, which is ignored by the English code—is characterised by greater elasticity and a comparative absence of minute, hard and fast requirements. To exhibit this difference fully it would be necessary to enter into much greater detail than is practicable here; but a comparison between the provisions for health and safety in the two countries quoted above will sufficiently illustrate the point. In Germany much more is left to the discretion of the executive; the objects are laid down, but more elasticity is allowed in adjusting the means to particular circumstances.

Now, it cannot be doubted that this course has been pursued deliberately by the legislature, which has fully recognised the objects of regulation and the duty of securing them, and has had the English example in view. It has clearly refrained from imposing rigid requirements on manufacturers of set purpose, because in some respects it has not hesitated to go beyond the English law, notably in regard to the age limit of children. In other words, it has kept in view the need of encouraging industrial enterprise in the interests of the community as well as that of protecting the workers, and it has endeavoured to hold the balance between these duties. This is part of a general

policy. The factory laws are an example of the extreme care which is taken in Germany by the legislature and the Government to assist industrial enterprise as much as possible and to hinder it as little as is compatible with other duties. The English factory laws are an illustration of our practice of dealing with things as they arise without any plan or conscious aim beyond the immediate point, which is settled by a trial of strength between conflicting interests. Sometimes the English plan works better, and in the present case the results are superior in some respects; but, on the whole, I think it is not so. The test of success is the attainment of the object, which is here to protect the workpeople without discouraging enterprise; and if the whole German scheme, which includes that most important complement, the State Insurance system, be taken into account, there is, in my opinion, no doubt that it does attain the object more satisfactorily than our own. The workmen are better cared for, and the manufacturers are most certainly less hindered.

The State Insurance will be discussed in a subsequent chapter. Without it the case would, perhaps, stand otherwise. If factory laws alone be taken the advantage lies, on the whole, with the English code, by reason of the superior protection given to women and young persons and in dangerous trades. The absence of notification of trade poisoning in Germany is a notable defect, for without notification it is impossible to say with any precision where and to what extent protection is needed, and how far the measures taken are effectual.

On the other hand, the English laws do unquestionably impose a substantial handicap on competing industries. They need not; it would be possible to obtain all the benefits that are now obtained, and more, without any

such drawback. What English manufacturers complain of and German ones do not, is a fussy and vexatious interference based on a pedantic application of the letter of the law without regard to the circumstances. Such complaints are by no means universal, but in some districts they are common. It is largely a question of administration. Where the executive officers are reasonable and judicious, there are no complaints ; but if an officer happens to lack those qualities, the law in some respects lends itself, by minute specification, to a needlessly harassing interpretation. No doubt it is a difficult matter ; for regulations, if they are to be effective, must be so framed as to exclude evasion by the less scrupulous manufacturers. But it is not manufacturers only who think our law too rigid. I have met with a still more decided opinion from a leading trade-unionist in one of our greatest industrial towns, a very thoughtful man. " The factory regulations," he said, " are too severe. We are moving in the direction of over-inspection." In particular he thought that " too much attention is paid to medical opinion ". He saw that ideal sanitary conditions might be too dearly bought. I should not say myself that too much attention is paid to medical opinion, but rather that medical opinion is too often based on inadequate knowledge.[1]

A striking case in point is the Cotton Cloth Factory Act. I have quoted above the regulation laying down a standard of atmospheric purity for cotton cloth factories using artificial humidity, which was based on " expert " recommendations. The manufacturers assented, but found on trial that the standard was impracticable and based on

[1] This tendency has been modified in recent years by the appointment of a special medical inspector possessing competent knowledge and able to check the indiscreet zeal of less instructed officers.

erroneous assumptions regarding the normal composition of the air. The experts took 4 volumes of carbonic acid per 10,000 as the standard of the outer air, and allowing 5 for the inside of the factory, reached a maximum of 9. But it was found that the outside air sometimes contains as much as 7 volumes, only leaving a margin of 2 for the inside of the building. The question was referred to a departmental committee for experimental investigation, and the report published in 1903 bore out the contention of the manufacturers. The regulation in force requires that " during working hours in no part of the cotton cloth factory shall the proportion of carbonic acid be greater than 9 volumes per 10,000 ". That is to say, an inspector can come at any time, whether artificial light is burning or not, and no matter what the external atmosphere may be, and take a sample of air at any point in the building, and if it contains more than 9 volumes the manufacturer is liable to prosecution and fine. The Committee found the regulation too stringent and recommended modification in regard to every single point. The regulation they suggested is—

> That the proportion of carbonic acid in the air at about the breathing level and away from the immediate neighbourhood of any special source of contamination, such as a person or light, shall not (except on very foggy days, when no tests should be made, on account of the vitiated state of the outside air) rise during daylight, or after dark when only electric light is used, beyond 12 volumes of carbonic acid per 10,000 of air, and that when gas or oil is used for lighting the proportion shall not exceed 20 volumes after dark, or before the first hour after daylight.[1]

In this careful recommendation, made after special investigation, foggy days are excluded, the point at which air may be taken is limited, daylight and artificial light are differentiated, and the standard is raised from 9 to 12 volumes in the one case and to 20 in the other. It is

[1] Departmental Committee on the Ventilation of Factories and Workshops. First Report. 1903.

intended for general application, but the report expressly recommends that cotton cloth factories should have the option of adopting it. As a matter of fact, the statutory regulation has not been vexatiously enforced, but the hard-and-fast rule which it lays down was evidently the outcome of insufficient knowledge, and cannot be sustained. It hung a harassing possibility over the heads of manufacturers, rendered their position insecure, and discouraged enterprise. A marked revival has taken place since this issue of the report just quoted, in the face of which strict enforcement of the Act can hardly be attempted, and is, therefore, less feared.

A similar case is that of a proposed standard of solubility for lead glazes, which it was sought to impose on the pottery trade in 1901, in response to a popular agitation, and on the strength of "expert" opinion. In this instance the manufacturers objected and brought the matter to arbitration. The evidence for the proposed standard fell to pieces, and it has not been imposed.

These two cases illustrate the tendency referred to by the trade-unionist quoted above. Both the trades concerned are exposed to the severest competition from foreign countries in which no such restrictions are imposed, and their capacity to bear unequal interference requires most careful consideration. A judicious attitude on the part of the authorities is the more necessary because, while competition has greatly increased, a kind of passion for interference has grown up and is fostered by popular agitation. It is not confined to considerations of health and safety, but is prepared to regulate the lives of others according to a wholly arbitrary standard. Thus it has been urged that the occupation of sifting dust and refuse should be prohibited to women; not on the ground of health, for it is

admitted to be healthy; nor on behalf of the women, who like it so much that they decline other work when offered in its stead; but simply because it is, in the eyes of persons belonging to a different social sphere, a low and dirty occupation. There are social "reformers" in England who regard manufacturers and industrial occupations very much as extreme teetotallers regard publicans and the liquor trade. They see nothing but what is bad in them and would reform them out of existence. This spirit has left its mark on the regulation of factories. It would have had a more serious influence, were it not for the judicious manner in which the executive officers, as a rule, discharge their duties.

These observations must not be taken to imply more than they contain. I am here discussing the facts and am not concerned to make suggestions. Factory legislation has had somewhat different conditions to deal with in the two countries. In England the extensive development of manufacturing industries came much earlier than in Germany, and therefore we have a larger proportion of old-fashioned establishments, which do not come up to modern ideas. Moreover, our workpeople are extremely conservative in their ways, and far from docile. It may well be, therefore, that greater strictness is necessary to produce the same result. And again, our industries have not required the careful nursing which has been necessary in Germany. These considerations explain the different spirit in which the problem has been approached here and there. It is a very shallow view which assumes that what suits one country will suit another. Nevertheless, the fact remains that our laws do impose disabilities on manufacturing enterprise, which are avoided in Germany.

America.[1]

Factory legislation in the United States comes under the head of "Labour Laws," which, however, deal with many other matters. Each State has its own code. There are United States "labour laws," but they are only concerned with such matters as the *status* of seamen, inspection of steam vessels, immigration, alien labour, trusts, coal-mines and Government departments. The laws relating to factories in the different States vary within very wide limits. The best way to give a clear idea of their scope will be to take three States as fairly representative of different classes—namely, Massachusetts, Pennsylvania and South Carolina.

Massachusetts.

Massachusetts has in some respects the most "advanced" factory laws of all the American States.

Protected Persons.

Children.—Children under fourteen may not be employed "in any factory, workshop or mercantile establishment"; nor may they be employed at all for wages during school hours or before 6 A.M. or after 7 P.M. Employment of children under sixteen "in a factory, workshop or mercantile establishment" is only allowed under the condition of an age and schooling certificate, granted by the superintendent of schools; a list of such children must be "conspicuously posted" near the principal entrance of the building in which they are employed, and a list of those of them who cannot read and write must be sent to the superintendent of schools. The granting of an age and schooling certificate

[1] Changes in the law are being made year by year in one or another State, and it is possible that by the time this appears some details may be out of date.

is safeguarded by elaborate rules, and "truant officers" have the right to visit establishments, inspect the list of minors, see that the law is obeyed, and report breaches. Further, illiterate minors over fourteen years of age may not be employed in any place where a public evening school is maintained, unless they are regular attendants at the school or are excused by a medical certificate on the ground that school attendance in addition to daily labour would be prejudicial to health.

The tenour of these provisions seems to show that the primary object of restricting child labour is education rather than health.

A section providing that children under fourteen must not be allowed to clean machinery in motion in a factory, appears to be covered by that already quoted prohibiting their employment.

Children under sixteen must not be placed in charge of an elevator, nor persons under eighteen in charge of one running at a speed of more than 100 feet a minute. Minors under eighteen must not be employed in the manufacture of an acid which the State Board of Health may determine to be dangerous or injurious to health.

Women and Young Persons.—Children under eighteen and women may not be employed for more than 10 hours a day, or 58 hours a week. Minors and women may not be employed between 10 P.M. and 6 A.M. "Young persons" (that is, between fourteen and eighteen years of age) and women shall be allowed their meals at the same hour, and shall not be employed for more than 6 hours at one time without an interval of at least half an hour for a meal. These provisions do not apply to iron works, glass works, paper mills, letterpress establishments, print works, bleaching and dyeing works; and they are subject to some other slight

qualifications. Deductions may not be made from the wages of minors and women, who are paid by the day or hour, for time during which machinery is stopped, if they remain in the factory. "Suitable seats" must be provided for females employed in "any manufacturing, mechanical or mercantile establishment".

General Provisions.

Health.

Every factory in which five or more persons are employed, and every factory, workshop, mercantile or other establishment, in which two or more children under eighteen years of age, or women are employed, shall be kept clean and free from effluvia arising from any drain, privy or nuisance, and shall be provided, within reasonable access, with a sufficient number of proper water-closets, earth-closets or privies; and wherever two or more males, and two or more females are employed together, a sufficient number of separate water-closets, earth-closets or privies shall be provided for the use of each sex.

In securing sanitary conditions, it is provided that the local sanitary authority has similar jurisdiction under the public health law to that in England, and is therefore auxiliary to the factory law executive.

Ventilation is provided for as follows:—

A factory in which five or more persons, and a workshop in which five or more women or young persons are employed, shall, while work is carried on therein, be so ventilated that the air shall not become so impure as to be injurious to the health of the persons employed therein, and so that all gases, vapours, dust or other impurities injurious to health, which are generated in the course of the manufacturing process or handicraft carried on therein, shall, so far as practicable, be rendered harmless.

The wording of the latter part is almost identical with that of the English section, but no standard of overcrowding or of ventilation is laid down.

Provision for the removal of injurious dust is also made in terms almost identical with the English Act quoted above, but there is one important addition. The English section says:—

If it appears to an inspector that such inhalation could be to a great extent prevented by the use of a fan . . .

The Massachusetts section says :—

> If it appears to an inspector that such inhalation would be substantially diminished *without unreasonable expense* by the use of a fan . . .

The proviso of reasonable expense is very significant. The question has often arisen in England, notably in connection with small pottery works. Some of these have no mechanical power on the premises, and no room for an engine. In order to comply with an order to provide fans under such conditions it would be necessary to put in an engine and rebuild the factory. Nothing excites more indignation in the stern reformer than leniency in these cases. It is, therefore, worth noting that the Massachusetts law expressly affords them protection.

Safety.—Plans of buildings more than two stories in height must be deposited with the district inspector and passed by him. Fire escapes must be provided for all such buildings. Steam boilers must be reported to the police and be submitted to inspection. There must be communication between the engine-room and every room in which machinery is worked by steam. Doors must not be fastened so as to prevent free egress. Hatchways, etc., must be protected by trap-doors or self-closing hatches. The fencing of machinery is thus provided for :—

> The belting, shafting, gearing and drums of all factories, if so placed as in the opinion of the inspectors of factories and public buildings to be dangerous to employees therein while engaged in their ordinary duties shall be as far as practicable securely guarded.

Self-acting mules must not be allowed to travel within twelve inches of any fixed structure. (In the English law the distance is eighteen inches.) Fatal and serious accidents must be reported to the police.

Wages.—Wages must be paid weekly. Those of weavers are protected by special regulations ; deductions may only be made for imperfections in the work and under certain

conditions ; the imperfections must be pointed out and the scale of deductions must be agreed upon beforehand ; specifications of work to be done and price paid must accompany the material given out for each piece of work. Similar specifications must be posted up in all textile factories in every room in which piece-work is done.

Dangerous trades are apparently not recognised, but there are special regulations for tailoring workshops, and by an Act passed in 1903 the provision of hoods and fans for protecting workers from the injurious dust of emery wheels was made compulsory.

Hours of Labour.—" Nine hours shall constitute a day's work for all labourers, workmen and mechanics who are employed by or on behalf of the Commonwealth or of any county, city or town therein." Cities or towns may adopt eight hours for their own workmen by public vote.

Holidays.—The legal holidays are seven in the year, namely : Thanksgiving, Fast and Christmas Days, 22nd February, 30th May, 4th July and the first Monday in September (Labour Day).

Inspection.—The inspection of factories is associated with that of public buildings, and is entrusted to a special branch of the police, consisting (Act of 1894) of twenty-four male and two female inspectors.

Penalties for breaking the law are fines varying from $10 to $300.

Pennsylvania.

The State of Pennsylvania has a " Factory Law," passed in 1901 and entitled " An Act to regulate the employment and provide for the health and safety of men, women and children in manufacturing establishments, mercantile industries, laundries, renovating works or printing offices. . . ."

The main provisions are as follows:—

1. Minors and women may not be employed more than 12 hours a day or 60 hours a week.

2. Children under thirteen may not be employed in the establishments mentioned.

3. Children between thirteen and sixteen may not be employed without an affidavit made by parent or guardian, or failing them by the child itself, stating age, date and place of birth, and kept on file.

4. Children must be examined as to their ability to read and write English by persons authorised to administer oaths; and if a child is unable to read and write or has not attended school as required by law or is under thirteen years of age, a certificate must not be issued.

5. A printed notice must be posted up in a conspicuous place in every work-room, stating the daily hours of work. Where children under sixteen are employed a list of names and ages must be similarly posted up.

6. Suitable seats must be provided for girls and women.

7. Hoisting shafts must be "properly and substantially enclosed or secured". Elevator ways must be provided with traps or automatic gates.

8. Where dangerous machinery is in use automatic shifters must be provided for throwing on or off belts or pulleys. "All gearing and belting shall be provided with proper safeguards." Children under sixteen must not be allowed to clean machinery in motion. Children under fourteen must not operate or have the care of an elevator.

9. All accidents or serious injuries must be reported to the factory inspector by the owner or superintendent within twenty-four hours.

10. Proper wash and dressing-rooms and water-closets must be provided; they must be entirely separate for

males and females, must be properly screened and ventilated and kept in a clean condition.

11. Not less than forty-five minutes shall be allowed for the noonday meal, but special permits for a shorter meal-time may be issued by the factory inspector.

12. The factory inspector has power to order alterations if he finds "the heating, lighting, ventilation or sanitary arrangement such as to be injurious to health or dangerous to employees, and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them; or if the means of exit in the case of panic or sudden alarm are not sufficient".

13. It is the duty of the factory inspector to inspect the means of escape from fire and to compel owners of buildings to comply with the law in this respect.

14. Owners of steam boilers must report their condition from time to time to the factory inspector, who has power to enter and inspect boilers, and if they are found to be dangerous to notify the owners, who must immediately cease the use of such boilers until placed in safe condition.

15. The factory inspector is authorised to appoint twenty-five deputies, five of whom shall be women.

16. Violation is punishable by a fine of not more than $500.

South Carolina.

The only laws affecting factories in this important manufacturing State relate to the employment of children and the hours of labour.

Previous to 1903 the employment of children was subject to no age limit; but in that year an Act was passed which laid down a minimum age of ten years from May,

1903, eleven years from May, 1904, and twelve years from May, 1905. Orphans and children of a widowed mother, or totally disabled father, dependent upon their own labour, are exempted. The same Act prohibits the employment of children under twelve between 8 P.M. and 6 A.M., but allows an extra hour up to 9 P.M., to make up for lost time caused by accidental stoppage.

With regard to the hours of labour the Revised Statutes of 1893 provide that:—

> Eleven hours shall constitute a day's work in all cotton and woollen manufacturing establishments in the State, for all operatives and employees, except engineers, firemen, watchmen, mechanics, teamsters, yard employees and clerical force.

This is subject to a *proviso* permitting overtime to make up for accidental stoppages.

Sunday labour is forbidden.

The foregoing summaries clearly show two things: (1) that the factory laws differ widely in the different American States; (2) that in none are they at all comparable with those of England and Germany. The other States more or less closely resemble one or other of the three types selected. A few have laws very similar to those of Massachusetts, and some of the middle States have more complete provisions with regard to safety, while at the other end of the scale some of the Southern States, in which manufacturing industries are extensively carried on, have even fewer restrictions than South Carolina, which has at least adopted an age limit for children. Others have none, and a proposal, recently made, to introduce a limit in Georgia was deliberately rejected. If factory legislation is a mark of "advanced" civilisation—which can hardly be denied—then the United States is far behind Europe. If, again, legal restrictions impose some commercial disadvantages on competitors in the indus-

trial struggle—which also cannot be denied as a general proposition — then European, and particularly English, manufacturers are placed at a substantial disadvantage in competing with American rivals. Similarly, some States in America are placed at a disadvantage with regard to others. The great development of the cotton manufacturing industry of late years in the Southern States as compared with New England is due more to this cause than to proximity to the cotton fields; for the latter advantage is largely neutralised by the system of rates imposed by the railroads.

There is, speaking generally, much greater reluctance to interfere with enterprise and much less enthusiasm for interference in America than in Europe. The legal right of the State to regulate the hours of adults has been challenged as an infringement of the Constitution, and in some cases such regulation has been declared unconstitutional by the Courts; but as a rule it has been sustained. The questions in relation to adult women came before the Superior Court of Pennsylvania so late as 1900. The argument was that the limitation of hours to twelve a day and sixty a week for an adult woman was contrary to the Constitution of the State of Pennsylvania as an "unjust interference with her right of acquiring and possessing property and pursuing her own happiness," and also contrary to the Constitution of the United States as "an attempt to deprive her of liberty and property without due course of law". The Court sustained the legality of the challenged provision; and undoubtedly the pressure of public opinion is tending in the direction of increased protection to workers after the European model.[1] Some

[1] An extremely important decision was rendered by the United States Supreme Court on 17th April, 1905, in the case of Lochner *v.* People of

States have extremely elaborate codes in relation to mining, and fresh laws extending and strengthening the control of factory conditions are being constantly passed in one State or another. America is "coming along," though slowly, reluctantly and with even less sense of system or principle than England.

The one marked exception to this attitude is the legislation for the protection of children in regard to age of employment. The age limit of fourteen years has been adopted in the following States, in addition to Massachusetts, which was the pioneer: Connecticut, Illinois, Indiana, Kentucky, Louisiana (girls), Maryland (subject to exceptions), Michigan, Minnesota, Missouri, New Jersey, New York, Ohio, Oregon, Tennessee, Washington and Wisconsin. This is one year later than in Germany and two years later than in England. In Pennsylvania the limit is thirteen; in California, Rhode Island, Maine, New Hampshire and some of the Southern States it is twelve. We see, therefore, that, in spite of Georgia, which has no limit at all, and some States which have ten years, America is on the whole decidedly in advance of Europe on this point; and the fact is significant. The history of the legislation, its form and the subsidiary provisions with which it is accompanied, show that the object in view is essentially to secure schooling for the children. The fact testifies to the marked concern about schooling which prevails in most of the States, and is proved in many other ways.

In the general protection of children Illinois is in advance of all other States; employment under sixteen is forbidden in a large number of dangerous occupations, and

the State of New York. That state has a law limiting the hours of bakers to ten a day and sixty a week. Five judges to four decided that the law was a violation of the Federal Constitution by interfering with freedom of contract and was therefore void.

the hours are limited to forty-eight a week in all gainful occupations.

In bringing this chapter to a close I must remind the reader that laws are one thing and their observance another. In comparing the three countries, there can be no dispute that laws are best observed in Germany and least in America, while England stands midway; and this holds good of the factory laws. There is abundant evidence that in the United States they are not exempt from the operation of that corruption in public life and contempt for law which astonishes every observant European visitor. Two or three illustrations will suffice to corroborate this statement.

In the annual report of the factory inspector of Pennsylvania for the year 1902, I find the following passage referring to child labour :—

> There were 407 illiterate children dismissed. These had been furnished with certificates in violation of law. The officer administering the oath had disobeyed the law in examining the children as to their ability to read and write the English language.
>
> A number of aldermen and notaries public have been prosecuted and fined for issuing certificates in violation of the factory law.

The same report shows that the law relating to accidents is an absolute farce. Of all the great steel and iron works in the Pittsburg district, employing in the aggregate scores of thousands of men in the most dangerous work, only one reported any accidents whatever. This total disregard of the law holds good generally throughout the State.

The limitation of hours by law is equally liable to non-observance. New Jersey is the most advanced State in this respect. There the hours laid down for women and children are even shorter than in Massachusetts, namely, fifty-five hours a week; but, says Mr. Carroll D. Wright, the United States Commissioner of Labour, "this regulation

is not observed, or at least only in slight degree, outside the silk industry".

Conclusion.—Factory laws are demanded in the interest of the community for the protection of workers, particularly women and children; but their unequal application may be to the disadvantage of one country in competing with another. The English laws are on the whole more stringent and less carefully adjusted than the German, and in some respects they exercise a prejudicial effect on the development of industries. In the United States the laws vary from nothing at all to a fairly substantial code; but as a whole they are elementary and very imperfectly observed.

CHAPTER VI.

FACTORY CONDITIONS.

(1) Premises.

The physical conditions under which work is carried on undoubtedly exercise an influence on efficiency, not only through their effect on the health and strength of the workers, but also on account of the facilities or hindrances to working involved. A good light, for instance, greatly promotes the execution of delicate processes; order, organisation and convenient arrangements in the workshop facilitate smooth working.

The inspection of a large number of factories, including the most famous establishments in existence, has produced a strong conviction in my mind that on the whole a higher standard in regard to such conditions is maintained in Germany than in England or in America, and that England stands next in this respect. But if the best alone be taken no superiority can be claimed for Germany. There are works and factories in America and in England quite equal in every respect to the German best. Indeed I have seen nothing anywhere so stately, well-built, well-kept and enjoying such surroundings as the great mills in the Bradford district. But the earlier development of manufacturing industries in England and the traditional practice of workmen starting factories for themselves on a small scale with small means

has produced a larger number of antiquated, cramped and dilapidated premises. This is notably the case in Sheffield, Staffordshire and on the Tyne. In Sheffield the file-cutting and cutlery industries are still often carried on under conditions so inferior that one wonders how the work is done at all. I have seen, even in a superior factory, men grinding hollow-ground razors—a delicate operation requiring the nicest manipulation—in a light so bad that they must have been guided more by sense of touch than of sight. And on the Tyne I have seen works—famous works too—so dilapidated that portions of the buildings and plant still in use were actually falling to pieces. Cramped, congested and untidy workshops are so common as to be almost characteristic. Some of the greatest engineering and machinery works have every shop in that condition. And they can be matched in America. We have no establishment of equal importance in England quite so ill-lighted, congested and inconvenient as the great locomotive works in Philadelphia. In Germany also, there are old and inferior works, but they are neither so numerous nor so bad. The standard is higher. To make a proper comparison, however, it will be necessary to take the more important points *seriatim*, and pass them briefly in review.

Air.—Speaking generally, this, which is one of the most important points in regard to the health of the workers, is well looked after in all three countries. If certain special processes, in which noxious fumes or dust are given off, be excluded, it may be said with confidence that the atmosphere now maintained in factories is better than that breathed in any other buildings frequented by the work-people. It is better than that in schools, churches, chapels, public-houses, public halls or theatres, and far better than that in the homes of the workers. I make this statement as

a matter of observation, but it is corroborated by scientific evidence and among other facts by the tests, so far as they go, of the Departmental Committee appointed by the British Home Office to investigate the ventilation of factories. The air of a large public hall was examined at different points and at different times in the evening, and it yielded from 14·2 to 44·4 volumes of carbonic acid per 10,000, giving a far higher average than the tests for the factories examined. I am confident from my own observations that further investigation would establish a marked superiority for factories in general over most other buildings, not excluding the Government offices occupied by the factory inspectors. The notion that the atmosphere of factories is exceptionally bad and injurious to health is derived from an earlier state of things and does not hold good to-day, save in special circumstances. There is not very much to choose between the three countries in this respect, but according to my observations fresh air is as a rule somewhat better secured, both in Germany and America, than in England, although the English law alone lays down a standard of over-crowding. The value of a standard of cubic space in securing purity of the air in rooms is one of those sanitary assumptions which have not stood the test of experience; evidence of different kinds has long been accumulating to show that the really important thing is ventilation or the supply of fresh and the removal of foul air. If these are secured the cubic space is of comparatively little importance, if they are not it is useless. And they are more generally secured by mechanical means in Germany and America than in England. Fans cannot be tampered with by the workpeople, who generally prefer a stuffy atmosphere and make a practice of closing windows and blocking up ventilators. This is notably the case in

fine-spinning cotton mills. The process requires a high temperature, and in order to attain the maximum output the spinners like a super-heated atmosphere and prefer to exclude the outside air unless the weather is very warm. Windows are also closed in order to keep the material from being blackened by smoke. In Germany fine spinning is not done, and in America it is only carried on at New Bedford; there I found the atmosphere decidedly better than in fine-spinning rooms at Bolton, but that may have been because the external air happened to be warmer at the time and could be more freely admitted.

With regard to injurious fumes and dust, great attention is now paid to minimising these evils both in Germany and in England, and very good results are obtained. But here, again, the same difference is observable. In Germany the conditions are more uniform; in England they vary greatly—some are very good indeed, others unsatisfactory. This distinction has its root in the national character. The Germans—both employers and employed—obey a rule or follow an example more readily; they are more docile and more open to innovations recommended by science or authority. The English, and particularly the workpeople, are very conservative, naturally disinclined to novelty, contemptuous of it and of authority.

I came across a characteristic illustration of this spirit at the British Westinghouse Works at Manchester. The installation is magnificent, and embodies numerous modern improvements. Among others are a number of smiths' forges with a down-draught arrangement which carries off all the smoke. The atmosphere was perfectly clear in the midst of a score or more of open fires. I stopped at one of the forges and said to the men, "This is a nice arrangement, isn't it?" "Well," said one of them, in a disparag-

ing tone, "we ain't accustomed to these 'ere fires." "What's the matter with them?" "Just about good enough to boil your can on," said his mate scornfully. "Oh," I said, "are they no good for forging?" "No; nor for welding either," they replied with intense disdain. And so on. "We ain't accustomed to these 'ere fires." That is the English workman down to his bones, and rather than change he will put up with smoke, fumes, dust or anything else, no matter how poisonous. German workmen and workmen in America, whether English or not, have little or none of this spirit; and therefore it is easier for conscientious employers to provide and maintain good conditions. They have not the same dead weight of unwillingness to work against. I speak of the rank and file of the workpeople, not of trade union leaders, who commonly lay great stress upon sanitary conditions of work.

Another reason why unsatisfactory premises occur more often in England is the discouragement of rebuilding induced by local bye-laws and high rates. It is not the fault of the bye-laws; they are necessary for the protection of the public, but they should be enforced with discretion, and should not be applied to cases for which they are not intended. I will give an instance. In one of the Midland manufacturing towns there are some particularly admirable electrical works. They are not large, but of a model character. I have not anywhere seen better workshops or better appointments for the health and comfort of the workers. The shops are modern, light, airy, well-warmed, clean and well-kept; there are dining-rooms, cloak-rooms, lavatories and so forth, separate for the men and women, and all admirably arranged. The business is increasing and the shops are so built as to admit of extension, when required. With this in view a large new workshop was

temporarily closed in at one end. Lath and plaster would have been quite sufficient for the purpose, as the structure was only intended to stand for a few months, pending extension of the building. Yet the local authority insisted on enforcing the building bye-laws, and put the company to the serious and useless expense of building an 18-inch brick wall. The London Building Act at present in force contains a clause which practically limits the size of work-shops, an unfortunate provision, as the largest shops are almost always the best. It is said to have compelled at least one firm to remove their large works elsewhere. I repeatedly inquired both in Germany and the States if manufacturers were subjected to any such disability, and was informed that it was unknown.

The English system of raising rates on assessment is a direct discouragement to rebuilding, which operates very strongly in just those places where rebuilding is required, and with increasing force in recent years, when municipal expenditure has risen in a reckless fashion. Sheffield is a case in point. It is a very old manufacturing town, full of cramped and antiquated premises; but I found the rates were 8s. 6d. in the £, and owners unwilling to rebuild because of the heavy tax imposed by the re-assessment of new premises.

Warmth.—Some premises require warming in winter, and this is more generally attended to in Germany and America than in England. No doubt the severe cold to which those countries are liable makes artificial warmth more necessary, and people are more used to it in general.

Light.—I am clearly and decidedly of opinion that good lighting is better secured in Germany than in England and better in England than in America. The German factory law alone mentions "sufficient light" as one of the con-

ditions to which attention must be paid, and great care is taken to secure it. I have not seen a single ill-lighted room or workshop. The window space is always ample and lighting from the roof is more general than with us. The practice of having workshops in several stories one above the other is much less common. The buildings are more spread out. And even textile mills rarely have more than three or four stories, instead of five, six or more. Weaving sheds are always lit from the roof, a very important matter, because with Jacquard or any similar looms side lights are so cut off that there is practically no daylight at all, unless it comes from above, and artificial light must be used. I believe that the care taken in this respect by German manufacturers is due less to the law or any compulsion than to their own recognition of the importance of good light in promoting efficient work. It is curious to what extent this most obvious fact has been ignored in building factory premises in the past in England. No doubt modern methods of construction permit of a larger window space than was formerly the case; but an examination of old premises reveals an indifference which seems to be intentional. All recently built factories, however, that I have seen are admirable and not surpassed by any in other countries. That cannot be said of the United States, where I have seen many modern mills and other works miserably lighted. Weaving sheds placed underneath other rooms are common, and, indeed, the rule. Spinning and weaving are more often combined in the same building than in England; and in that case the spinning rooms are at the top and well lighted, the weaving sheds on the ground floor, underneath other rooms, and so dark that artificial light has to be continuously used. A bad light is the most conspicuous and general defect of American factory premises.

With regard to artificial light electricity is now coming into general use in all three countries.

Safety.—The fencing of machinery is carried out much more thoroughly in England than in Germany according to my observation; in America it is almost ignored. I have referred to this point in the last chapter, and have mentioned the complaints of vexatious requirements made by English manufacturers in some districts; but, broadly speaking, they heartily recognise the need and the advantage of fencing. It is an interminable problem, because new machinery is constantly being produced, and the protection required is rarely thought of beforehand; but the tendency is all in the direction of increased safety, and much machinery is now sent out provided with proper guards. It cannot be doubted that other countries will eventually level up to the English standard in this respect. I am told that German manufacturers ordering English machinery now have it sent provided with guards. In some American factories and notably in the larger cotton mills in the South, danger from machinery is to a certain extent obviated by the exceptionally ample floor space and wide gangways; and both in America and in Germany I have seen many ingenious arrangements for disposing safely of belting and shafting; but the complete covering in of moving and projecting parts, which may be seen in some of the best English factories, does not seem to have been attempted.

Dust.—I am not able to speak with equal confidence about the disposal of dust. To form a judgment it would be necessary to compare a number of special trades, which I have not had the opportunity of doing. But if the arrangements in leading cutlery works at Sheffield and Solingen respectively dealing with dust in dry grinding and polishing be taken as a criterion, I can only say that

the German hoods and extracting fans seemed the more efficient of the two, though I note the improvement at Sheffield recorded by the superintending inspector, who after enumerating a number of grinding processes, says: "It would now be difficult to find any one working at one of the above-named processes without a fan and suitable pipes, cowls or bonnets to carry off the dust".[1]

The superiority of the German arrangements noted by me seems to be borne out by the age-mortality figures for grinders in the two districts, as given by Dr. J. Uffelmann:—[2]

PERCENTAGE OF DEATHS OF GRINDERS OVER 20 YEARS OF AGE.

	Under 40.	Over 40.
Solingen district	58·5	41·5
Sheffield district	63·5	36·5

It would not be right to draw any general conclusions from this particular case, but I am bound to say that it is in accordance with the superior standard of general cleanliness unquestionably maintained in German factories and discussed below. In American factories, on the other hand, the opposite obtains. I have not seen any of the dangerously dusty industries as carried on in the States; but with the exception of emery grinding and polishing in some States they are subject to no special regulation, as I have shown in the last chapter; and in regard to other industries a general slovenliness prevails which is rarely seen in England and never in Germany. This is notably the case in the great cotton mills in the South. They are in many respects very well appointed, but the air is commonly filled with cotton fibre and dust, which lie thick upon the machinery and floor. Insufficient time appears to be devoted to cleaning.

[1] *Annual Report of the Chief Inspector of Factories for 1902*, p. 79.

[2] Eulenburg: *Real-Encyclopädie der gesammten Heilkunde*, "Arbeiterhygiene".

Sanitary provisions.—In this respect English factories are distinctly inferior although they are gradually improving, and many modern premises leave nothing to be desired. The provision of baths, washing-places, cloak-rooms for women and clothes-lockers for men, as well as an adequate number of closets, is general in Germany and common in America. In England it is still exceptional. This is partly due to the larger number of old premises, but much more to the habits of the English workpeople, who do not care for washing facilities and generally make little or no use of them when they are provided. I have repeatedly seen rows of washing-basins which were never used or used for anything but washing; and at the British Westinghouse works I had an opportunity of witnessing a practical illustration of the disdain with which they are regarded. At these great works most extensive lavatories have been provided, containing in all some 2,000 basins. I was talking to the superintendent when the closing bell rang. "Now," said he, "we will go and see how many of the men are using the lavatories to clean up after work." As we walked across the galleries, a few seconds after the bell, the floor below was already black with the hurrying crowds rushing for the door and pulling their coats on as they went. In a moment they were gone. In one of the lavatories we found a solitary workman washing himself with great relish. That was all out of 3,000 or 4,000. "Ah," he said, as he scrubbed himself dry, "it's a great boon if they only knew it." English workmen love to be dirty all the week; they seem to take a pride in presenting a ruffianly appearance. It is the mark of their calling, the honourable badge of toil, the privilege of the "horny-handed". On Saturday evening, on Sunday and on holidays no one is cleaner, and only those who go to the most

expensive tailors are better dressed. These habits deceive the unwary observer, who thinks that American workmen are better dressed. But let him note the two on Sunday and take a good look at the crowds of tidy, well-dressed young men who parade the streets of every English industrial town with equally spruce and well-dressed women folk. The grimy ruffians and the slatterns of the week are gone, metamorphosed into these clean and comely persons. I do not know, but I fancy there is an unwritten social law which makes cleanliness on week-days, or at any rate to and from work, an affectation and an offence. A man who breaks it is regarded as giving himself airs.

Now in Germany and America workmen of the better class keep themselves clean. In the former they are taught cleanliness at school, and during their period of military service they acquire the habit in barracks, where the sergeant takes good care that they "wash behind the ears," and they retain it. Mechanics, artisans and others engaged in dirty work keep a suit for the workshop and put their better ones in a locker on arriving. At Krupp's works at Essen the numbered lockers run up to 29,000 and some hundreds. Washing after work is part of the process of dressing, and the men are glad to make use of facilities which are liberally provided. In all large works that I have seen douche and other baths were provided, as well as hand-washing places, and they are largely used in summer though less often in winter. In America the democratic principles of social equality take the place of military training to some extent in the inculcation of cleanliness with a similar, if less uniform, result; but the provision of washing facilities is much less general than in Germany, and the lower class of European workmen, who are very numerous, still exhibit their native dislike of soap and water.

It is not the fault of the factory inspectors in England that more washing accommodation is not provided. On the contrary, some of them are apt to be pedantic on the subject and to make a fetish of basins. They visit the workpeople's preference for dirt upon the manufacturer and urge him to more strenuous exertions, as though the multiplication of basins would have the hypnotic effect of an oft-repeated advertisement and simply force people to use them by the power of suggestion. They insist that basins shall be of a certain pattern and placed so many inches apart; they lay down an arbitrary standard of the number of basins in proportion to workpeople. This is vexatious when those already provided are not used. I do not know any West End club which would satisfy the requirements, and I never go into my own, of which the chief inspector of factories is a member, without thinking of the painful report upon the sanitary arrangements which one of his lady inspectors would certainly make if it were a factory. In short, we have the fuss, but do not get the result. I do not see why so much importance is attached to basins. A trough with running water is simpler and better adapted to the purpose, more cheaply and easily provided and less subject to damage; but I am afraid that English factory hands will never take advantage of washing facilities until, in the first place, they are brought up to it, and in the second are not in such a desperate hurry to be off to their amusements.

Other Appointments.—The question of benevolent or paternal institutions will be separately discussed in a subsequent chapter, but I do not include among them factory appointments for the ordinary comfort and convenience of the workers. In some works such appointments are carried to the point of luxury, and then they partake of a paternal

nature; but these establishments are of a somewhat exotic character and not representative. It is possible, however, in all works to treat the workers as human beings, and to pay a certain attention to their needs without indulging in the superfluous luxuries of the show place. I regard the distinction as important, because I find everywhere, in spite of isolated instances to the contrary, a growing dislike of paternalism, but on the other hand the opposite extreme of absolute indifference to the comfort of workpeople, outside the requirements of factory laws, also seems to be giving way to a feeling in favour of a middle course, which aims at the provision of reasonable comforts while avoiding anything in the nature of fancy appointments. Cloak-rooms and lockers, which have already been mentioned, come under this head; so do dining-rooms and canteens. In very large works, employing many thousands of hands, it is of course impossible to provide messrooms for all; nor is it necessary for those workpeople who are housed near their work; but for those who are not it is a real boon and a comparatively simple matter to provide hot water and means for heating the food they bring with them. I have found this generally preferred to a canteen, where the men are apt to grumble at the food served, and to complain that they do not get their money's worth. In works and factories of moderate size messrooms can be provided. This is done in some modern establishments, both in England and in America, but it is more common in Germany; and where messrooms exist they are often furnished with a small library and a piano and are used for social purposes. These are of the nature of superfluities and verge on paternalism, but if the people provide their own that objection is removed. That sort of thing would be less appreciated in English manufacturing towns where the people are abundantly sup-

plied with means of recreation, but messrooms are coming into favour.

Order.—Of all conditions relating to premises this is the one in which German factories most conspicuously excel. They are clean, orderly and well-kept in a remarkable degree. These qualities seem to be universal, and they extend to the dirtiest and most untidy departments. The foundry is the severest test. It is usually a scene of dirt and disorder, unmitigated by any attempt to be tidy, and aggravated by an atmosphere heavy with smoke and gloom. The German foundries were a revelation to me; they are as clean and well-kept and almost as light as any other shop. The remarkable order maintained is systematic and in a large measure intended to promote the prevention of accidents. I am told that a very different state of things used to prevail, and I conclude that the Accident Insurance laws have a good deal to do with the improvement. In the accident-prevention rules of the Rhine-Westphalian Engineering and Small Iron Industries Association, I find it laid down in the first paragraph that—

> The gangways in all work-rooms must be broad enough to exclude as far as possible injury to persons using them by machinery or transmission parts in motion. They must be kept in good condition and must not be blocked by the heaping of material or the transport of articles.

That is exactly what happens in most of our engineering shops; there is no room, the place is congested, and manufactured or half-manufactured articles lie promiscuously about in all directions, blocking the fair-way. The entire freedom from such disorderliness in German shops and work-rooms undoubtedly conduces to efficiency as well as to safety; and it is secured chiefly through the habits of order inculcated into all alike—workmen, managers and owners—by the military discipline they have all alike undergone. English manufacturers appear to be learning

the lesson ; the newer shops put up by alert and enterprising firms are admirably arranged, and leave nothing to be desired in the way of order. Perhaps the Workmen's Compensation Act has not been without influence in this direction. In the United States I have already described two establishments—Brown & Sharp's tool works at Providence and the Westinghouse electrical works at Wilmerding—which can hardly be surpassed. There are others equally admirable, but the general level, though perhaps higher than in England, is certainly below the German standard.

(2) Plant.

No charge has been more assiduously brought against English manufacturers than that they have suffered their plant to fall behindhand and are quite outclassed in this respect, especially by American competitors. There is truth in the charge, but it requires some large qualifications. In the first place, the whole range of textile industries, which constitute by far the most important class of our manufactures, must be exempted, and with them a very large branch of the machinery industry.

Take cotton, the greatest of all the textile industries. I think it can be conclusively shown that though the Lancashire mills fell behind several years ago the manufacturers applied themselves to recover lost ground with so much energy and success that they have ever since led the world in equipment, and have displayed unequalled enterprise in the adoption of improvements. I have some interesting evidence on the subject from America. I have already (Vol. I., p. 268) described a strike, which I witnessed at Lowell, for an increase of wages. The argument used by the strikers was that higher wages were paid at Fall River,

and the answering plea of the employers was that on account of the inferiority of their plant they could not afford to pay the same wages as the Fall River mills. This confession of inferiority was not only accepted by the strikers but was laboured in my hearing by their counsel, who laid the blame for the admittedly inferior equipment on the neglect of the mill owners in allowing their plant to become antiquated. The cotton manufacturers at Lowell, therefore, stand self-condemned on this point. But perhaps the equipment at Fall River is of extraordinary merit. I went over some of the chief mills and did not think so; but not willing to trust my own judgment I asked the secretary of the Operative Cotton Spinners' Trade Union. He had been to England not long before, and had gone over a number of mills at Bolton. His verdict was that Lancashire was more up-to-date and more ready to adopt improvements. "If an improvement to mules, for instance, comes out the Lancashire spinners adopt it at once; here they will go on with the same for thirty or forty years."

This is an absolute reversal of the relative position which has been much too freely assigned to English and American manufacturers. And it is not confined to cotton, but holds good of the wool and worsted trades, of hosiery and carpets. Indeed this superiority of equipment in the best English mills is even more marked in some of these trades than in cotton. The best textile machinery is still English in spite of American enterprise and German application. In the most up-to-date cotton mill in the States (at New Bedford) and one of the very few which spin really fine counts of yarn, I found that all the breaking, carding, combing and spinning machines came from Manchester. So too with looms. "They cannot make a good loom here," said the instructor in weaving at one of the newest and most per-

fectly equipped textile schools in the States. "These things are no good," he continued, indicating several of the machines under his charge, "some of them are an absurdity; paint covers a multitude of sins." No doubt they are improving the quality of their textile machinery, both in America and in Germany, and are rapidly becoming more independent; but it is largely by copying English models. The weaving instructor just mentioned made an exception in favour of one firm of American makers, and gave me a curious explanation of their success. A loom made at Keighley in Yorkshire and consigned to an American mill was somehow dropped at the machine works, and since then they had been turning out good looms, which were an exact copy of the strayed English model. Such was his story. The American weakness for turning out hurried and badly-finished work is fatal in dealing with the finer sorts of textiles, which can only be successfully produced by accurately working machines. The Germans, who do not suffer from that weakness, are now more self-sufficing in superior textile machinery than the Americans; but I found the installation both in mills and textile schools still largely of English origin. In the newest and most perfectly equipped textile school in Germany, which makes a specialty of cotton, I found machines by nine English makers against a single German firm in the same processes, and in showing me round the director, who was for a moment at a loss for the technical name of some part of a machine, applied to a man standing by. He was an English workman engaged as practical instructor.

These facts might be corroborated by others. For instance, in the finest worsted mill in the United States I found combing machines from Leeds, spinning frames from Keighley, and looms from Bolton; and in a leading hosiery

mill in Saxony I found the knitting machines nearly all English. But perhaps enough has been said to make good my point. I do not deny the enterprise and progress of America and Germany, but I contend that in the whole group of textile trades English manufacturers have fully held their own and have displayed rather more than less ability to keep abreast of the times in regard to mechanical equipment. I am reminded of an answer given me in a great English establishment, which stands at the very head of its own department—Platt Brothers, of Oldham. We were talking of foreign competition, and I said: "You know the Americans are very ingenious". "So are we," was the sturdy reply, and it is justified. The machines turned out from Oldham go all over the world, including the United States, and are of unimpeachable quality. And the equipment of the works is not surpassed by any establishment on a similar scale in the world. But the cotton manufacturers of Lancashire do not confine themselves to home-made improvements and remain oblivious to what is going on elsewhere. The Americans have recently displayed their ingenuity and enterprise by developing two inventions of much importance in the cotton industry. These are ring spinning and the automatic loom. The first is an old appliance originally brought forward in England; the second is the invention of a Yorkshire mechanic, who went to the States a few years ago. But the credit of developing both belongs to America. They are suited to the class of work which is chiefly carried on there. Ring spinning is not applicable to the production of the finest yarns, but it is very convenient and economical for low and medium counts. Similarly the automatic loom is only, as yet, suitable to very plain weaving; but it is extremely economical, for a single weaver can attend to from sixteen

to twenty-four looms instead of two. These machines, therefore, do not compete with that section of the trade which is concerned with the finer products, but their value for the commoner classes of goods is fully recognised by Lancashire cotton manufacturers and machinery makers. Ring-spinning frames have been introduced into many mills, and automatic looms are being adopted. Improvements on the American (Northrop) type have already been brought forward.

In the second place, a great change has recently taken place even in those trades to which the charge of backwardness properly applied. There is no doubt that in many of the metal and leather trades, for instance, the application of machinery for increasing the output and cheapening production was until quite recently carried very much further in America than in England, and that the equipment of English factories and works had become antiquated. The reasons are quite obvious. English manufacturers had long been in possession of a market which satisfied their needs, and not feeling the stress of competition had not exerted themselves to change the old order. American manufacturers were compelled to exert themselves to make a market, and were spurred on by that driving ambition which distinguishes them. One of the difficulties with which they had to contend was scarcity and consequent dearness of labour; and this stimulated the inventive faculty with which they are so richly endowed. They applied all their ingenuity to the development of labour-saving machinery with immense success. The same stimulus of necessity has driven German manufacturers along the same road. Less inventive than the Americans they have relied more on their remarkable capacity for applying science to industry and for assimilating new ideas, wher-

ever they originate; and they have been untiringly alert in noting and adopting improvements. Meanwhile English manufacturers jogged on in the old track and were left behind. This is not the whole story, and supineness is not the only cause of their eclipse. Industrial development has been hindered in some directions by antiquated regulations, for the government has been even less wideawake than the manufacturers; and the introduction of new methods has been more effectively resisted by the workmen in England than elsewhere. I shall return to this point when dealing with trade unions. The fact that many English trades did fall behind-hand in equipment needs no detailed proof; it has been fully admitted to me in private conversation by manufacturers of the highest authority. But it is, I think, interesting to note the opinion of English workmen or those who represent them, and I will therefore tabulate the reports of those members of the Moseley Commission who represented the manufacturing industries most affected.

But before doing so I should like to express an appreciation and a criticism of those reports. Taken as a whole they do great credit to English labour. Some of them are quite admirable, I might even say masterly. They are marked by shrewd observation, sound judgment and an excellent faculty of direct and pithy expression. Most of the members praise American education, but their own essays are an uncommon testimonial to the results which may be obtained in benighted England. On some points the information supplied them was defective and hence a good many discrepancies; but upon the question of factory equipment each man speaks with intimate knowledge of his own trade and is a competent witness. At the same time a certain allowance must be made for the unconscious prejudice attaching to their official position as representa-

tives of British workmen, which has led them into some curious inconsistencies. Thus we are told that American workmen are better educated and better paid, American factories better equipped and supplied with better material and yet the product is inferior or no better. Since the product is the object and the test of the conditions of production, it is difficult to see on what ground they can be judged superior if their combined result is inferior. Reluctance to admit that any workman can turn out better work than the Englishman is here evidently struggling with a too ready recognition of the advantages enjoyed by his competitor; and some qualification is necessary to reconcile the opinions expressed. They are as follows:—

QUESTION.

Do you consider American factories better equipped for production than English?

ANSWERS.

Blast-furnacemen—Yes, very much better.

Iron-founders—There is not a great deal of difference, but what little there is is in favour of the Americans.

Iron and Steel Workers—There is no doubt that the leading mills of American manufacture are far ahead of our own best mills in their arrangement and output.

Engineers—In some respects American workshops are better equipped than English. They are equipped with a greater variety of special tools made for special work and repetition work.

Shipbuilders and Boilermakers—The equipment of ship-yards and shops in other ways, that is in machinery, is not better than in Great Britain; in fact, better machinery can easily be found in the old country.

Shipwrights—Speaking generally, and applying the question as to ship-yards, I do not think so.

Sheffield Cutlers—Yes. There is a greater use of machinery, and no expense is spared to secure any new device that will increase the output.

Midland Metal Trades—Yes.

Cotton Spinners—The only advantage is that a much better material is used.

Cotton Weavers—American cotton mills are well equipped.

Boot and Shoe Operatives—Some are and, on the other hand, many are not. The employers in America do not hesitate to invest in

new machinery, and if it does not come up to expectations, they put it aside. Any fresh idea is worked for all it is worth.

Leather Workers—Yes.

Paper-makers—Yes.

Out of thirteen answers representing from twenty to thirty trades, seven are more or less decidedly affirmative, two are affirmative with qualifications, two are non-committal and two are distinctly negative. When the necessary allowance has been made for the conditions I think these answers fairly represent the truth. It must be remembered that as visitors the members of Mr. Moseley's party were shown the best in America, whereas their position as trade unionists makes them more familiar with the worst at home. The representatives of cotton spinning and weaving did not visit Lowell, which is equivalent to leaving out Oldham at home, and their investigations appear to have been confined to the best mills at Fall River and New Bedford. In view of the evidence given above, I think it is clear that their answers, cautious as they are, are too favourable to the American industry, and show more desire to see merits than defects. The Fall River trade unionists thought so, and particularly desired me to qualify one statement made by Mr. Wilkinson to the effect that the material supplied for weaving is much better in America. That was only true, they said, of the warps. I think that the opinions quoted in regard to some of the other trades should be discounted in a similar way, but when all allowance has been made the verdict of these representatives of English labour must be accepted as broadly confirming the charge of antiquated equipment in English works in a number of metal trades at least.

It would, however, be a great mistake to generalise or to attach too much importance to this factor. The difference is most marked in the production of raw or half-manu-

factured iron and steel, and above all in the rolling mills, which, until lately, carried the application of machinery much further than had been attempted with us. But even at Homestead, where this work is carried on at the highest pressure, I noticed some facts which suggested caution in making comparisons to the disadvantage of England. The newest and by far the best shop there is devoted to the manufacture of armour plate, a steel product which requires the most costly machinery and the most expert knowledge. I was told that this part of the Homestead industry is being carried on in conjunction with Krupp's; but having the newest shops at Essen and Sheffield fresh in my mind I was by no means overwhelmed by the installation of the Carnegie Company, and noted with considerable interest that the heavy tools bore the names of two firms at Leeds, of one at Manchester and one at Glasgow, and that the hydraulic press which was being erected under the eye of a Scotch foreman also came from Manchester.

The most instructive point, however, in connection with equipment is this, that English manufacturers have already learnt their lesson and are profiting by it. As I have said, they know that they had fallen behind and admit it. Once alive to the fact, they have set to work to recover lost ground with an energy which is full of promise. In all the works which I have visited in the course of this inquiry I found the heads of the business perfectly cognisant with what is being done in other countries in the way of machinery and appliances. In every case I found that owners or managers or engineers had been to the United States or Germany or both, and that no one could tell them anything they did not know. Floods of advice have been showered upon them, and possibly some of it has been useful, but I am satisfied that they know their own busi-

ness very well and have neither less capacity nor less energy than any of their competitors. I found new plant being laid down and new appliances being introduced in one metal trade after another, from blast furnaces down to curry combs; and not in these alone, but wherever the pinch of necessity has been felt. This is the great teacher; it has taught other countries to develop their powers to the utmost and to take advantage of every device in order to come up with England, which had so long a start. Now it is England's turn and the lesson has not failed to produce the same impression upon manufacturers. They have been the first to learn it, because they have been the first to feel the need. Other classes will have to learn it too, and are perhaps beginning to do so—the workpeople, the commercial people, the official people, the political people and, finally, the general public. Meanwhile it is high time to recognise that manufacturers are already setting their house in order. I am at present speaking only of plant; there are other points in which they still seem hardly to realise the situation, but in this they do, and the fact should be stated with as much emphasis as the charge of previous backwardness. It is the more necessary because criticisms of their inefficiency have been very much overdone and have damaged English industries in the eyes of foreign customers, who have heard them denounced and their rivals extolled by Englishmen so loudly that the notion that England is indeed "played out" has taken deep root. I have met with it everywhere.

Now it may be doing the fishmonger a service to call his attention to the fact that his fish are not so fresh as they might be; but to run up and down the market crying "stinking fish" and pointing out the extreme freshness of the goods proffered by a rival firm is not wise, more especi-

ally when the fish of the rival firm are not so very fresh after all. This is what a good many English visitors to the United States have done. They have overstated the case, partly through generalising too hastily, partly through ignorance of the conditions at home, partly through being dazzled by the American shop windows. We have heard a great deal, for instance, about the American practice of "scrapping" machinery every few months, and this has been extolled as a great virtue, as though scrapping were an end in itself. For my part I fail to see that it is any proof of sagacity to be continually putting in machinery which has to be thrown out again in a few months to make room for something else. If American manufacturers were generally in the habit of doing so they would be very foolish; but they are not. A false impression has been derived from particular cases. I have already mentioned one in Chapter IV. The Westinghouse Electrical works do make a practice of selling a quantity of machinery every few months and replacing it by something newer; but theirs is a special case. Mr. George Westinghouse is a born inventor with a still active brain, and he is continually making experiments and improvements. The trial of new machinery is part of the business, and the old is not scrapped but sold. Of course there must be scrapping. In all trades improvements are introduced from time to time and occasionally a revolution is effected. So it has always been since machinery was invented. Of late years such improvements have been more frequent in America and have given manufacturers there an advantage. But there are compensations in being moderately backward, if the power and the will to regain ground are not lost. Those who follow often surpass those who lead if they are willing to study the example and profit by the experience. Eng-

land has led in many things besides manufacturing industries and has seen herself surpassed by those who followed—notably in matters of public health, in drainage, isolation hospitals and water supply—only to come to the front again by learning in turn from them. The great mistake which English manufacturers made was to ignore too long what other people were doing and to despise their rivalry. That mistake can never recur. Having recognised the situation they are profiting by the experience, and it may be confidently anticipated that in no long time their equipment will be not merely equal but superior to that of any competitor.

A point to which much attention has been drawn in connection with improvements in plant is the question of encouragement given to workmen of an inventive turn. It is true, I believe, that suggestions are more generally welcomed by employers in America, but I have met with no evidence of the existence of systematic encouragement. Repeated inquiries of employers as to whether they offered any reward produced only negative answers. "No," they said, "there was no standing offer, but if a man made a suggestion it was considered, and if it was thought good they took it up and he derived an advantage from it, either directly in money or by promotion." Inquiries among workmen generally elicited the opinion that suggestions were indeed taken up, but that the workman got very little out of it; employers were ready enough to exploit his brains but kept the lion's share of the profits to themselves. I suppose that the poor inventor has always and everywhere been liable to the same untoward fate. America is no paradise for him, for he is still dependent on the capitalist. But it is generally easier for him to get a hearing there than in England. I should rather say that inventive workmen are

less discouraged there than that they are more encouraged. The patent laws are less heart-breaking; but it is not true, as I have often seen alleged, that a man has only to file his idea for a small fee and the office guarantees the validity of the patent. The matter is not quite so simple as that. It is necessary to employ an expert to draw up a proper specification, and though the office undertakes a preliminary examination the granting of a patent does not ensure its validity or guarantee it from attack. The inventor has still to take that risk, and as a matter of fact the proportion of patents which turn out invalid in the United States is higher than in England, usually over 50 per cent. against 40 per cent.

On the other hand, there is more direct encouragement in England than is generally supposed. I have found a standing reward offered for suggestions in several factories, and in others I have met with men who had risen to good positions through making suggestions, and were well satisfied with the encouragement they had received. I have met with such men both in textile mills and in iron and steel works, and I have no doubt that if the history of foremen and shop managers in general were examined it would be found that a large proportion of them had risen from the ranks by this road. The head man in charge of the hydraulic press in one of our largest works told me that he had come on as a fitter, but he used to think about his work when he went home at night, had ideas and made suggestions, and so rose to his present position, which carries with it five times the pay of a fitter. He said that intelligent men were encouraged at those works, and rather laid the blame on the younger men for failing to make use of their opportunities. I have frequently met with this opinion among older men who have risen to superior posi-

tions by their own exertions. The young men, they say, now think too much about football and other amusements and take no interest in their work; their minds are occupied with other things. One firm of manufacturers, engaged in a special metal trade, which affords great scope for ingenuity and has been revolutionised in America, had for two years offered a standing reward of £50 for any suggestion by workmen without eliciting a single attempt to earn it. The blame for lack of inventiveness, therefore, must not be laid wholly upon the employers.

Where discouragement exists, I have found it generally traceable to foremen, who are willing to take credit to themselves for any suggestion, but snub the common workman who is unfortunate enough to have ideas. Of course, the remedy for that is greater accessibility of the heads of a concern; and it cannot be doubted that the direct and frank intercourse between man and man, whatever their positions, which is such a striking feature of American life, is a valuable factor in promoting enterprise. But the main difference is an indefinable something in the air, arising out of the general conditions. In the United States every ambitious and adventurous tendency is fostered as in a forcing house by the restless, striving spirit that pervades the atmosphere, and has its origin in the boundless possibilities seeming to lie before every man in a democratic country, sufficiently developed but not yet filled up, and possessing a vast protected home market. In the earlier period of industrial expansion in England, the application of mechanical power to manufactures opened up similar possibilities, and had a similar effect in stimulating invention; but the cutting down of profits by factory restrictions and by free imports has largely removed the stimulus, while the restraint on individual enterprise exercised by

trade organisations, and by the general influence of a groove established, has damped the ardour of invention, though it has not destroyed the inventive faculty. This is proved by the inventiveness developed by British workmen who have emigrated to America. In the more stimulating and congenial atmosphere their faculties, which have lain sterile at home, are brought to fruition. The Northrop loom, which is perhaps the most important mechanical appliance contributed to manufacturing processes by the United States since the cotton gin and the elevator, is a signal example. "Since 1860 the number of patents issued to citizens of foreign countries has increased in a much greater ratio than the number of patents to American citizens." [1]

In Germany the question hardly arises so far as workmen are concerned. I made inquiries everywhere about it and always received the same reply, that no suggestions were ever made by workmen. Mechanical inventiveness and initiative are not among the natural gifts of the German nation. In the early days of machinery when power was first being applied to the textile industries, German manufacturers were put to a great disadvantage by their inability to produce the new appliances and they had to depend on surreptitious borrowing from the French or English. They have not been without their successes, as the names of Krupp, Hartmann, Siemens and Loewe sufficiently testify; but their industrial triumphs have come more by way of the laboratory than of the workshop. They have, however, made up for this comparative deficiency of natural endowment in truly characteristic manner by study, care and knowledge. The equipment of their works and factories cannot be surpassed at its best,

[1] *Twelfth Census of United States*, vol. x., p. 758.

and the general standard reached is at the present time probably higher in Germany than in England or America. In the application of electrical power the German workshops are certainly as far advanced as any; they are fitted with the most modern tools both large and small; and though still dependent on England for some kinds of textile machinery, Germany is decidedly more self-sufficing in that respect than the United States. Manufacturers obtain their machinery from every source without prejudice wherever they can get the best for their purpose—from England, Switzerland and the United States, as well as from their own makers—but they are becoming more and more self-sufficing. They are, in fact, at the present time supplying English workshops with the very appliances in the production of which England excels, such as heavy machine tools and hydraulic presses; and English manufacturers who have installed German tools agree in pronouncing the quality first-rate.

With regard to the use made of machinery and the pace at which it is run, I notice that Mr. Moseley's trade unionists express different opinions on the relative rates of speed in England and America. Their observations confirm my own impressions; the conditions vary in different trades. In some the speed is certainly greater; in others, cotton spinning for instance, it is not; and in cotton weaving Mr. Wilkinson says the output per loom is less in American mills. On the other hand, in worsted mills I have seen combing and other machines running themselves to pieces and spoiling the material. It is on this side that Americans incline to err. Excessive speed is apt to sacrifice quality to quantity, and is therefore only advantageous when the latter is the main object, as in the production of half-manufactured steel. Finished work will not be hurried, and the

attempt to hurry it is largely responsible for the most prominent defect in the manufacturing products of the United States, namely the prevalence of rough, badly finished or flimsy work. When the output of American rolling mills is extolled as an example to European manufacturers they may reply by pointing to American locomotives which break down after a few months, to machine tools which have to be strengthened to do their work, and to looms which will hardly work at all. Speed is not an end in itself and may be overdone or misapplied, like many other things. The object, from the point of view of industrial efficiency, is neither quantity nor quality in itself but a combination of the two in varying proportions according to the class of products. This problem seems to me to be better solved in English factories than in those of the United States or of Germany. The former are apt to make too much of speed, the latter too little. It is not in the German temperament to hurry, and they never sacrifice quality to speed; but they sometimes do the reverse when it is unnecessary. I have it on the authority of a leading English trade unionist, who thoroughly understands first-class engineering work and has been through the principal workshops in Germany, that German mechanics are unnecessarily thorough in giving a minute finish to their work. Morally a merit, but industrially a defect. Between the two extremes comes the English temperament, more careful of quality than the American, more capable of speed than the German. In industries which have their equipment up-to-date the combination of speed and quality attained by English manufacturers easily surpasses either of their competitors. Of this cotton is a notable example.

It is not part of my purpose to discuss the economic or social aspects of the development of machinery. However

interesting they may be they are outside the scope of my inquiry. I may say, however, that the broad outcome is to cheapen production, and to make life physically easier both to consumer and producer. The former has innumerable things brought within his reach ; the latter is spared much toil and yet generally earns higher wages. The last point opens up a question of much importance, with which I shall have to deal—namely the resistance offered to machinery by workmen ; but it will be more convenient to discuss it in connection with trade unions. The effect of machinery on the worker is a subject on which much has been written. It has been deplored from two points of view—that of the philanthropist or sanitarian and that of the socialist. The former deplores its physical, the latter its social effects. Both views seem to me inconsistent with the facts. With regard to the first the development of machinery has been accompanied by great and continued improvements in the conditions under which work is carried on ; and it enables the workman to earn more money in shorter time and with a less expenditure of bodily exertion. With regard to the second it tends to that equality and suppression of the individual which is the ultimate aim of socialism. In short it is a mighty agent in promoting what both call "progress". So far as it makes greater demands on the workman they are in the direction of increased mental quickness and power of attention. There are exceptions ; attendance on some slow-moving automatic machinery is a mere saunter and amongst the very easiest ways of earning a living that have ever been devised. But economic pressure tends to correct this by multiplying the number of machines attended to by one man ; and generally speaking mechanical processes of manufacture, from the electric crane to the self-actor mule, require progressively

more and more concentrated attention. And as machinery is extended and perfected less and less manual skill is demanded. This is deplored on other grounds; but it is plausibly argued that the energy released by the disappearance of manual processes is applied to other and "higher" forms of mental activity. In short, however we look at it, machinery appears to make for "progress". Where "progress" is making for is another question, on which I will express no opinion. It is open to men like Ruskin, who did not believe in "progress," to object to machinery, but denunciation by those who do is illogical.

All these questions have, however, a merely academic interest. Whether we like it or not, "whirr! whirr! all by wheels! whiz! whiz! all by steam" is the burden of our civilisation, and we shall go on marching to that tune whithersoever it leads. The nation which aspires to a place in the industrial race must whirr and whiz with the best.

CHAPTER VII.

HOURS.

In every country the hours of work vary so much in different localities and trades that no summary statement about them can be made with precision. The attempt to do so by striking an average without an explanation or further details seems to me merely misleading. This is particularly true of the United States, where the variations are very wide. Both in England and Germany the hours are more uniform, largely owing to the factory laws, which prescribe a limit where women and children are employed. Such a limit appears to set a standard for other trades in the same locality although no women or children may be employed in them. But even in England and Germany, if all industries be taken, the variations are sufficiently wide to make an average untrustworthy. It is necessary to utter a warning on the subject, because the natural craving for a precise and summary statement has produced such averages. They have appeared clothed in all the authority of official reports, and have been accepted as final without any examination of the basis on which they rest. Thus it is said and repeated that the "hours of labour" in the United States are much less than in Germany. If all occupations, including State and municipal employment, handicrafts and building trades, be counted in, I have no doubt that the statement is valid, because the average is brought

down by an eight hours' day. But to apply it to competing manufactures, whether in general or in particular, is a totally different matter; and I think that in this restricted application it can only be maintained with a good deal of qualification. The distinction must be borne in mind. It will explain some discrepancies between my results and others that have been published; for I am only concerned with manufacturing industries. The non-competing trades and public employment have not the same international significance, and must be left out of account.

One general statement may be made with confidence. It is that hours of work are shorter in England than in Germany or in America. This is true both in general and in particular. I cannot find any industry in which the English hours are not shorter, though individual establishments may be found in the United States working no longer than those of the same trade in England. How much shorter they are is a question which can be better determined after we have examined the facts in detail.

England.

Comprehensive and trustworthy statistics with regard to hours of work are not easy to get; but perhaps sufficient information can be derived from various sources.

In the textile industries the hours are practically limited to 55 a week (with an additional half-hour for cleaning) by the provisions of the Factory Act for regulating the employment of women and children. (See Chapter V.) In some establishments this limit is not reached, but, to be on the safe side, we will say 55 hours a week in this large group of manufactures.

Probably the next group in importance is formed by the engineering trades. For these full details are given in

the Annual Statistics of Rates and Wages, prepared by the Amalgamated Society of Engineers. The following fifteen trades are included in the group: smiths, fitters, turners, millwrights, planers, borers and slotters, millers, coppersmiths, brass finishers, machine joiners, pattern makers, die sinkers or press tool makers, electrical engineers, roll turners, drop-hammer forgers. The hours vary in different localities from 48 to 56½, but the latter only occur in three or four small places. In the great centres of engineering they are uniformly 53 or 54 and 48; the latter occurs in Government establishments, in a few private ones and generally when day and night shifts are worked continuously. Taking the most important districts, we have the following number of hours for the ordinary week: Manchester, 53; Leeds, 53; Newcastle and Gateshead, 53; Birmingham, 53; Oldham, 53; Bolton, 53; London, 54; Sheffield, 54; Glasgow, 54. In his report as a member of the Moseley Commission, Mr. Barnes, the secretary of the Amalgamated Society, gives 52 as the average for the engineering trades.

In a number of associated trades, such as the boilermakers, iron founders and shipbuilders the hours are the same; and this holds good of the smaller metal trades—tubes, nuts and bolts, locks and keys, chains, edge tools, files, cutlery and other things. In all these the weekly hours are 53 and 54. So also in the boot and shoe trade.

In short, the normal week in England may be set down at 53, 54 or 55 hours. It very seldom exceeds this limit and then only by an hour or two, except when continuous work is divided into two shifts. But that is exceptional; the 8 hour shift giving 48 hours for six days and 56 for seven days is now almost universal. If, therefore, an average is to be struck it would be quite safe to say that it

does not exceed 54 hours a week or 9 hours a day; and I do not think it possible to get any nearer than that. Of course the week is not divided into six days of 9 hours each, because Saturday is a half-holiday. This institution and the prevalence of the 8 hour shift form the chief differences between England and the other countries in regard to time conditions. In textile factories the day's work, except on Saturday, is usually done from 6 A.M. to 6 P.M., or 12 hours minus 2 hours for meals as required by the law; or else it ends before 6 P.M. with $1\frac{1}{2}$ hours for meals. Thus the first five days in the week account for 10 hours each or 50 in all. The remaining 5 are worked on Saturday, namely from 6 to 12, with one hour for meals as required by law. In other factories where the working hours are only 54, 53 or less in the week, the curtailment is effected by leaving off somewhat earlier on ordinary week days. The usual time allowed for meals is an hour for dinner and half an hour for breakfast. Sometimes also an afternoon interval for tea is allowed. It is found that the workpeople like to begin early and leave off early particularly on Saturday, so as to get the whole afternoon free. The latest change in the law was devised largely with the idea of giving them an extra half hour in bed on Saturday; but they do not appear to care for that. At one of the largest mills in the country a poll was taken and 97 per cent. voted for 6 in preference to 6.30 A.M.

Before leaving the subject of hours in England it is necessary to mention a question which gives rise to a great deal of friction. The workpeople constantly complain that the nominal hours are not kept and that many employers are in the habit of "cribbing" time at the intervals or at the end of the day by running machinery for a few

minutes later than the stated hour, or starting a few minutes earlier. It is impossible to say how far this complaint is justified, but I have met with it so often, particularly in textile districts, that I cannot suppose it to be unfounded. Its existence is evidence of the inveterate distrust of employers entertained by the employed, which is such a fruitful source of trouble between them in England.

Germany.

I gather from many public utterances that an erroneous impression prevails concerning the hours of work in Germany. They are decidedly longer than in England, as I shall show; but the difference is not so great as it is commonly represented to be. I do not know whence this erroneous impression has arisen, but it may perhaps be due to the factory laws which permit women to be employed for 11 hours a day on ordinary week days and for 10 hours on Saturday. If these hours were generally kept the impression would be justified, but actual investigation shows that they are not. As the point is one of importance, I shall state the facts with some particularity, and will give the exact hours worked in a number of factories representing different trades in different towns (1903).

1. Silk mill at Crefeld—

Summer.

Begin	7 A.M.
Breakfast	8.30 to 8.45 A.M.
Dinner	12 to 1.30 P.M.
Tea	4 to 4.15 P.M.
Close	7 P.M.

Total, 12 hours, *minus* 2 hours for meals = 10.

Winter.

Begin	7.30 A.M.
Dinner	12 to 1.30 P.M.
Tea	4 to 4.15 P.M.
Close	7.15 P.M.

Total, 11¾ hours, *minus* 1¾ hours for meals = 10. On Saturdays the closing time is 5.30 P.M. The week is therefore 58½ hours in summer and 58¼ hours in winter.

2. Engineering works at Düsseldorf—

Begin	6.30 A.M.
Breakfast	8.15 to 8.30 A.M.
Dinner	12 to 1.30 P.M.
Tea	4.15 to 4.30 P.M.
Close	6.30 P.M.

Total, 12 hours, *minus* 2 hours for meals = 10. Week, 60 hours.

3. Machinery works at Düsseldorf—

Begin	7 A.M.
Dinner	12 to 1.30 P.M.
Close	6.30 P.M.

Total, 11½ hours, *minus* 1½ hours for meals = 10 hours. Week, 60 hours.

4. Hosiery mill at Chemnitz—

Begin	6 A.M. (winter 7 A.M.).
Breakfast	8.30 to 8.50 A.M.
Dinner	12 to 1 P.M.
Tea	4 to 4.20 P.M.
Close	6 P.M. (winter 7 P.M.).

Total, 12 hours, *minus* 1 hour 40 minutes for meals = 10 hours 20 minutes. On Saturdays close at 5.30 P.M. Week, 61½ hours in summer, 60½ hours in winter.

5. Cotton mill at M. Gladbach—

Begin	7 A.M.
Dinner	12 to 1.30 P.M.
Tea	4 to 4.15 P.M.
Close	6.30 P.M.

Total, 11½ hours, *minus* 1¾ hours for meals = 9¾ hours. On Saturdays close at 5.30 P.M. Week, 57½ hours.

6. Woollen mill at Elberfeld—

Begin	6 A.M.
Breakfast	8 to 8.15 A.M.
Dinner	12 to 1 P.M.
Tea	4 to 4.15 P.M.
Close	6.30 P.M.

Total, 12 hours 30 minutes, *minus* 1 hour 30 minutes for meals = 11 hours. On Saturdays close at 2 P.M. Week, 62 hours.[1]

[1] In May, 1903, the hours at this mill were voluntarily reduced by the employers to 60. It is interesting to note that the men demurred to the change, being on piece work, and said they could quite well do 62 hours. But on its being pointed out to them that the 10 hours' day was being demanded by social reformers they acquiesced.

7. Cutlery works at Solingen—

Begin	7 A.M.
Breakfast	9 to 9.15 A.M. (youthful workers 9 to 9.30).
Dinner	12 to 1.30 P.M.
Tea	4 to 4.15 P.M. (youthful workers 4 to 4.30).
Close	7 P.M.

Total, 12 hours, *minus* 2 hours for meals = 10 hours. Week, 60 hours for men, 58½ for women.

8. Engineering works at Chemnitz—

Begin	6 A.M. (winter 7 A.M.).
Breakfast	8 to 8.30 A.M.
Dinner	12 to 1 P.M.
Tea	4 to 4.15 P.M.
Close	6 P.M. (winter 7 P.M.).

Total, 12 hours, *minus* 1¾ hours for meals = 10¼ hours. Week, 61½ hours.

9. Steel works at Essen (Krupp)—

Begin	6 A.M.
Breakfast	8 to 8.15 A.M.
Dinner	12 to 1.30 P.M.
Tea	4 to 4.15 P.M.
Close	6 P.M.

Total, 12 hours, *minus* 2 hours for meals = 10 hours. Week, 60 hours.

Here are five metal and four textile factories, representing the principal groups of industries and situated in seven representative industrial towns. In the metal trades the hours are with one exception uniformly 60 a week; in the textiles they vary from 57½ to 60, so that the average is somewhat less than 60. These examples, however, though typical and authoritative (the details being taken from the factory rules which have the force of law), are too few to warrant a general statement. I will therefore supplement them with some more comprehensive information kindly collected for me by Dr. W. Zimmermann, of Berlin.

The Hirsch-Duncker trade unions (see Chapter XIV.) publish some comprehensive statistics on the subject of hours every three years. They are arranged in such a manner as to make it difficult to use them, but Dr. Zimmermann has worked out certain results. The largest

union is that of the machinery and metal workers, and they furnish reports from 460 places, covering nearly all the industrial districts in Germany. The summary result is as follows:—

Normal Hours a Day.	Number of Places.	Percentage of whole Number.
Under 10	31	7·0
10	269	58·5
10-11	66	14·0
11	62	13·5
Over 11	32	7·0

In about two-thirds of the places reporting, the hours are 10 or less. An analysis of the localities reveals considerable differences. Thus the proportion of places reporting 10 hours a day or less in each district is as follows, the total number reporting in each being placed in brackets: Berlin district (11) 90 per cent.; Würtemberg (13) 90 per cent.; Hanover, Oldenburg, Hanse towns and Schleswig-Holstein (19) 89 per cent.; Kingdom of Saxony (23) 84 per cent.; Baden, Rhein-Pfalz, etc. (25) 80 per cent.; Province of Saxony (Prussia), Anhalt, Brunswick, Thuringia and Hesse (47) 76 per cent.; Bavaria (12) 75 per cent.; Brandenburg (46) 65 per cent.; Rhineland-Westphalia (155) 58 per cent.; Posen, Pomerania and Mecklenburg (43) 56 per cent.; Silesia (67) 50 per cent. Of course the industrial importance of these districts varies greatly, as the varying number of places in each suggests. The average is brought down by the large number of places in Silesia, Rhineland and Westphalia reporting 11 and 12 hours a day. This is in a considerable measure due to the 12 hour shifts regularly worked in blast furnaces and foundries, which are numerous in these districts. The difference between the two-shift and three-shift day in continuous working is a very important item in determining the mean hours

in certain trades, and it is one of those factors which tend to mislead. For instance, if the normal day for most workers in certain industries is 10 hours in two countries, A and B, but in one the two-shift and in the other the three-shift day prevails in those departments where work is continuous, you would get the statement—hours in A (having the three-shift day) 8 to 10; hours in B (two-shift day) 10 to 12. Then if an average is struck it will be A 9 hours, B 11 hours, and the conclusion is reached that in those industries the working day is about two hours longer in B than in A, when as a matter of fact, for the great majority of the workmen and the processes it is exactly the same in both. I think therefore that the factor of shifts should be separated if possible from the question of hours in non-continuous work; but of course it must be taken into account in making international comparisons. It increases the general advantage enjoyed by English workmen in regard to hours, since the 8 hour shift, as I have said, is almost universal in England, whereas in Germany and America the 12 hour shift is either universal or general.

The trade union reports just quoted go to show that the hours worked in the representative establishments I have given above are exceeded elsewhere; but they support the general conclusion that in the large majority of establishments 10 hours is the normal day, and that in most of those which exceed 10 hours the day is somewhere between 10 and 11 hours. Even in that part of Germany where the longest hours prevail, namely Silesia, the 10 hour day obtains in half the cases reported. This is very different from statements current in England which represent the general working hours in Germany as 11 and 12 a day. So far as I can ascertain 11 hours are only exceeded in

the two-shift industries; and in them it is customary to give two hours off for meals, so that the real working hours are 10.

Some further notes are furnished by Dr. Zimmermann from various sources.

The annual report of the Berlin Trades Council for 1902 says that of 71,776 workmen, chiefly trade unionists, 21,356 worked 60 hours a week and all the rest less. That was in a time of depression, and it includes all trades.

The Düsseldorf Trades Council prepared in the same year the following figures:—

District of Düsseldorf.

Industry.	Number of Workmen.	Hours Worked.
Machinery and metal trades	940	11
	259	$10\frac{3}{4}$
	570	$10\frac{1}{4}$ to $10\frac{1}{3}$
	441	10
Textiles	700	$11\frac{1}{4}$
	475	11
	770	$10\frac{3}{4}$
	990	$10\frac{1}{2}$
	1950	10
	28	$9\frac{1}{2}$

Rest of Rhineland-Westphalia.

Industry.	Number of Workmen.	Hours Worked.
Machinery and metal trades	430	11
	180	$10\frac{3}{4}$
	580	$10\frac{1}{2}$
	2300	10
Textiles	2337	11
	140	$10\frac{3}{4}$
	250	$10\frac{1}{2}$
	1180	10

I confess I do not understand the meaning of these figures. The numbers given bear no sort of relation to the numbers actually employed. There were nearly twice as many men employed in Krupp's works, which are within the area, at 10 hours a day than in the whole of this list; and to my certain knowledge there are more men employed in machinery works in Düsseldorf alone at 10 hours than are given for the whole district. Then what is the meaning of 570 men working from $10\frac{1}{4}$ to $10\frac{1}{3}$ hours? The only explanation I can think of is that the list refers to the grievances of members of the unions and includes overtime, which is very common in Germany.

The chief Factory Inspector for Saxony reported in 1902: Dresden, in many factories the so-called English day (7 A.M. to 5 P.M. with half an hour for dinner) obtains; Meissen (pottery works), generally 10 to 11 hours; Freiberg, in a number of establishments at the request of the workers the day has been shortened by abolition or curtailment of tea time; Zittau, in weaving sheds the 10 hour day is general; Leipzig, in the printing trades the normal day is 8 to 9 hours, in textiles the 11 hour day is still almost universal.

Another official report for Saxony states that in the Bautzen district the working day for adult males in most businesses is 11 hours; longer hours only occur in individual cases during the summer months in brick-fields and quarries; with a few unimportant exceptions the 10 hour day is universal in the engineering trades.

From these various *data*, derived from trade union and official sources and from personal inquiry, I think a broad generalisation can be made with some confidence. It is that in those large competing branches of manufacture with which I am concerned the normal working week in Germany

is most commonly 60 hours, but when it departs from that standard it is more often over than under the 60 hours. It is true that all these figures relate to a time of depression, and in busier periods much overtime is worked; but on the other hand the movement for reduction of hours is going on all the time. As a proof I may compare the previous Hirsch-Duncker report with the one given above, thus:—

Percentage of Places Reporting.

	1900.	1903.
Under 10 hours	3½	7
10 hours	52	58½
10 to 11 hours	16	14
11 hours	21	13½
11 to 12 hours	7	7
12 to 14 hours	½	...

If a summary comparison must be made I should say that the normal working day in the chief manufacturing industries is from 1 to 1½ hours longer in Germany than in England, and that the difference constantly tends to diminish. In the large concerns on which the brunt of competition falls the difference is only 1 hour or half an hour a day. In those industries, however, in which continuous working obtains, such as blast furnaces, glass, paper and chemical works, the difference is increased by the prevalence of the 8 hour shift in England.

Some other points may be noted. The deliberateness characteristic of German life is shown by the length and frequency of meal intervals. The time allowed for dinner is never less than an hour and sometimes an hour and a half, and from a quarter to half an hour is allowed for afternoon coffee as well as for breakfast. I have met with no complaints of cribbing time; it would be entirely contrary to the national spirit, for if the Germans have a conspicuous virtue it is the observance of rules established. The hours

of work, it must be remembered, form part of the factory rules, which are legally binding on employers and employed.

The hours of beginning and closing are also significant. Only two out of the nine factories start at 6 A.M. all the year round; 7 o'clock is more common, and in winter the hour is even extended to 7.30. Factory labour hardly begins earlier than business, in marked contrast to the practice in England. This concession is made good by the later hour of closing, and this holds good of business also. The characteristic deliberateness is accompanied by an equally characteristic steadiness and tenacity of effort. The hours leave much less opportunity for other occupations in the evening, which may or may not be a good thing; it depends on the way the time is spent. Further reference will be made to this point; but I may observe here that the hours of work leave German workmen with less both of inclination and opportunity to spend money on amusements. Only in one factory on the list (No. 6) is Saturday afternoon secured as a holiday, and that by lengthening the other days to 12½ hours. Everywhere, however, the women leave off at 5.30 P.M. on Saturday. This is secured by law with the object of enabling them to prepare for Sunday.

United States.

It is not possible to present the facts so simply in the case of the United States. There, even in factories, the hours vary from 48 to 84 a week. Both extremes are exceptional; but within these outside limits very large variations exist even in the same trades, and the discrepancies are too great and too numerous to be reconciled by some half-way average. It is necessary to differentiate between the States and to group them. In the

Census Report, which gives a good deal of information about hours of work, six groups are distinguished: (1) New England, (2) Middle, (3) Southern, (4) Central, (5) Western, (6) Pacific. The two last are unimportant and may be left out of account. The others stand in the following order according to the number of wage-earners employed in manufactures: (1) Middle, (2) Central, (3) New England, (4) Southern, having, in round numbers, 2,000,000, 1,500,000, 1,000,000 and 700,000 wage-earners respectively.

Taking textile factories we have particulars of thirty-four establishments (cotton, woollen, silk, hosiery, dyeing) thus distributed, with the hours worked :—

Locality.	No. of Establishments.	Hours a Week.
Middle States	14	60 (all)
New England	13	58 (6) 60 (7)
Southern States	6	60 (3) 66 (3)
Central States	1	48

Tabulating the thirty-four establishments according to hours worked we get the following:—

No. of Mills.	Hours Worked.
24	60
6	58
3	66
1	48

It is certainly difficult to strike an average from these figures, even if we accept the proportions as fairly representative of the whole country. No doubt the 60 hour week prevails in the great majority of American textile mills, but I doubt if the relative prevalence of the variations from that standard is correctly represented. For instance, the 48 hour mill is altogether exceptional and a very small concern employing about 100 hands. I believe also

that considerably more than half the southern mills work 66 hours and not 60. I have visited a number of the largest of them and found them uniformly working 66 hours. I have heard of some working 72 hours. If, however, the foregoing figures be taken as they stand and treated arithmetically, the number of hours above and below 60 exactly balance each other, and 60 emerges as the normal week. This is a little less than in Germany, but in my opinion it is too low as a statement of the facts in regard to international competition. The severest competition offered by America in the textile group comes from the cotton industry in the Southern States, where the average working week is at least 63 hours and probably more.

Passing on to the metal group I have tabulated details of fifty-eight establishments in the four areas taken above. They represent a large number of industries, including foundries, rolling mills, the manufacture of engines and machinery of various kinds, locomotives, boilers, tyres, tools, etc.; and they are thus distributed: Middle States, 25; Central States, 18; Southern States, 8; New England, 7. The hours come out as follows:—

No. of Establishments.	Hours Worked.
42	60
7	59
1	58
1	57
1	56
3	55
2	54
1	50

Here, again, the normal week is 60 hours, though a perceptible proportion of works curtail that time by one hour, and a slightly larger proportion further reduce it by varying amounts down to 50 hours. But the establishments working the short times are all small and probably of a special

character. The 55 hour week obtains in establishments which close early on Saturday after the English example. Some of the works included in the 60 hour group return also other times, both above and below 60, as worked in different occupations carried on in the same factory. Such minor variations occur in other countries. For instance, in machinery works men may be kept on in the foundry, or those engaged in subsidiary occupations may be dismissed earlier; but the normal time holds good for the general body of workpeople. When shifts are worked the weekly hours are generally 72, 78 and 84; that is to say, the shifts are of 12 hours for 6, 6½ or 7 days in the week. This is enormously in excess of the English prevailing practice. It is not easy to say how it compares with the German practice in the same industries. In Germany, as I have already said, 12 hour shifts are the rule, and in a number of industries (blast furnaces and other iron and steel works, chemicals, glass, cement, sugar refineries and others) exceptions are allowed to the statutory prohibition of Sunday employment. But in all cases provision is made for regular times off; in most cases 24 hours are allowed every other Sunday or 36 hours every third Sunday, and the principal holidays are observed. In the United States, on the other hand, a practice largely prevails of working night and day shifts in alternate weeks and in some establishments the night crew only works five days in the week, so that the average week is 66 hours instead of 72. At Homestead the day shifts are 10 and the night 14 hours. With all these complications and modifications it is not possible to make a summary arithmetical comparison; and these are not all. Meals must be taken into account. The nominal 12 hour shift makes no allowance for meals; it is from 12 to 12. But, of course, meals must be eaten and if time off

is allowed for the purpose it should be deducted from the nominal hours, as it is in reckoning the day's work in non-continuous occupations. Now much greater respect is paid to meals in Germany than in America. In the latter I have found in establishments working at high pressure and in 12 hour shifts that in some departments the men were allowed half an hour for dinner and in others nothing at all; they snatched their food as best they could. In Germany I have found in similar works two hours allowed for meals. Taking all these considerations into account I do not think that according to the practice prevailing in 1900 the hours of work in the great group of industries in question could be said on the whole to be appreciably less in America than in Germany, if indeed they are not more.

The same conclusion holds good of other important competing manufactures and may be accepted as generally valid. In glass and paper-making, for instance, the hours in the United States were 60 and 72; in the manufacture of boots and shoes they were 60 and 59.

Since 1900, however, considerable changes have taken place in the direction of reducing hours. The same movement is going on as in Germany, but apparently with greater rapidity. It has taken effect notably in engineering works, in which the week has been reduced to 54 hours for several classes of workmen in several States. I am not in possession of any *data* which would enable one to measure comprehensively the extent of this movement, but the Massachusetts Bureau of Statistics of Labour has recently published a report relating to the year 1903 which contains the fullest and most authoritative statement of hours worked, among other things, that has appeared in any country. It relates only to Massachusetts, and as that State is in advance of most others in regard to hours, it

must be taken to represent conditions above the average. The inquiry embraced 44,606 workers, of whom 59·39 per cent. were on time and 40·61 per cent. on piece-work. I extract the following summary details:—

Boots and Shoes.—Excluding watchmen, firemen and engineers, the average hours worked per week range from 54 to 59 in the different processes, of which about 160 are enumerated. (These lists incidentally afford most interesting evidence of the astonishing length to which the subdivision of labour has been carried by the application of machinery. Massachusetts, it may be remembered, is the greatest centre in the world for the manufacture of boots and shoes, and in no industry has American inventive genius been so active.) In nearly half the processes enumerated the hours are 58 or over, and only in seven are they as low as 54; so that the average cannot be placed much below 58, which is probably the standard.

Cotton.—The average hours enumerated range from 48·50 (band boys) to 66 (starchers). No average can be struck here, and it is difficult to state the hours even in the principal processes. Six varieties of "spinners" are enumerated with hours ranging from 54·44 to 58; card-room hands vary from 55·42 to 58·14; weavers average 56·87; slubbers, 56·58; winders, 57·36; lappers, 58·09; loom fixers, 56·67; second hands, 59·60; third hands, 58·11; piecers, 58·00; finishers, 58·33. From these examples it may perhaps be concluded that the normal week is intended to be 58 hours, but for some hands it is a little above, for others below that standard.

Leather.—The hours are much more uniform and most departments conform to a standard of 59.

Machines and Machinery.—Here again the variations are wide and range from 54 to 60 hours. Some seventy-five

classes of workmen are enumerated, of whom the great majority work from 54 to 57 hours a week and a large number do not exceed the minimum of 54 hours. Taking some of the principal classes we have the following: Armature winders, 54; blacksmiths, 55; boiler-makers, 54·52; brass-finishers, 54; brass-moulders, 57; coppersmiths, 55·67; core-makers, 54·80; draughtsmen, 55; drillers, 55·69; drop-forgers, 54; filers, 54; foremen, 55·53; gear-cutters, 56; grinders, 54; lathe-tenders, 55·26; machinists, 55·14; moulders, 56·05; pattern-makers, 55·83; planers, 55·12; punchers, 54·46; riveters, 54·70; sheet-iron workers, 54. It is clear that the hours are considerably less in these trades and approximate to the English standard.

Metals and Metallic Goods.—In this group the hours are longer. Thus we have: blacksmiths, 57·14; core-makers, 57·52; razor hands (etchers, finishers, grinders and handle-makers), 56; iron-moulders, 59·53; pattern-makers, 55·67; screw-cutters, 55; solderers, 58; wire-workers, 58. The week ranges from 55 to 58 hours, and it is far more often 58 than 55. Perhaps 57 would be a fair average.

Paper.—The standard is 58.

Woollen Goods.—The standard appears to be 58, but the actual hours more often exceed than fall short of it.

Worsted Goods.—The same holds good of this industry.

The report, which is more concerned with earnings than with hours, does not explain the variations and discrepancies, but I conjecture that they are due in some measure to overtime and short time. The details were taken from the books of the manufacturers. An attempt to obtain corresponding information from trade unions only elicited partial details relating chiefly to the building and hand trades.

If I may venture to summarise the results of the inquiry I should say that in Massachusetts the standard week in

the chief manufacturing industries is as follows: leather trades, 59 hours; textiles, paper, boots and shoes and several metal trades, 58; other metal and machinery trades, 56, 55, and 54 hours. There is clearly a tendency to approximate towards the English standard, but even in this advanced State the minimum is still about the English mean.

Some results of a wider investigation by the United States Bureau of Labour are published in the Nineteenth Annual Report for 1904. I extract some details of the average weekly hours worked in 1903.

Agricultural Implement Makers.—Fitters and grinders, 54; the rest, 58·25 to 59·56.

Carpets.—58 to 59·32.

Cotton.—Mule spinners, 58·85, all the rest over 60; dyers, 62·24.

Dyeing and Finishing.—58 to 59·61.

Foundry and Machine Shop.—53·91 (riveters) to 59·77 (cone-makers).

Hosiery.—56·75 (finishers) to 60 (ribbers).

Iron and Steel.—Blast furnacemen, 84; Bessemer furnacemen, 56·73 to 67·10; bar-iron, 61·30 to 65·39; blooming mill, 48 (3 men in one establishment) to 72; muck-bar, 59·06 to 61·38 (puddlers, 59·63; rollers, 61·38); open-hearth furnacemen, 72 to 74; rail, 56 (leverman) to 72 (catchers, chargers and roughers).

Leather.—Between 59 and 60.

Wool and Worsted.—58 (combers) to 60 (carders and spinners).

The question of overtime greatly complicates the international comparison of hours. The material for estimating its relative prevalence does not exist; but the impression I have gathered from various indications is that it is much more common in America and in Germany than in England.

A special inquiry made in Massachusetts in 1904, shows that a great deal of night work is carried on in textile mills.

By this time the reader who has followed me so far will probably agree with me that it is a very difficult thing to arrive at a summary conclusion, which can be expressed in figures, regarding the hours of work in the three countries. I have made the attempt so to compare England and Germany, and have said that in the latter the daily hours average from ½ to 1½ in excess of those in England. The chief difference between Germany and America is that the range of variation is greater in the latter, and while at one extremity the excess over the English standard is quite as high in America or higher, at the other end it disappears and the English standard is reached, which is not the case in Germany. I conclude, therefore, that the mean level of hours is somewhat higher in Germany, but not much.

Neither the U.S. Census nor the reports of Mr. Moseley's trade union party,[1] with one exception, nor any other inquiry with which I am acquainted gives any exact information about the time of beginning and closing, or about the meal intervals in American factories. I have therefore to fall back upon my own notes.

As in Germany, I find the time of beginning apt to be later than in England; 6.30 and 7 o'clock are common. This, of course, involves leaving off later. The matter is of more importance than appears on the surface. I have mentioned one effect of the later start and longer hours when dealing with Germany; it affords factory hands less opportunity for amusement in the evenings. It also makes attendance at evening schools much less easy, and this

[1] Reports of the Moseley Industrial Commission.

constitutes the most salient difference between the trade (technical) education carried on in English industrial towns and that in Germany and the United States. In England the classes are chiefly held in the evening, and are formed mainly or entirely by mill and factory hands. In Germany and the United States, the classes are chiefly day classes, and are attended by any one except workmen. This important fact is generally ignored. Writers on education point to the larger number of students in the day classes in Germany and the United States; but they forget the opposite side of the picture and say nothing about the absence or extreme smallness of evening classes, which alone can be attended by workmen. I shall refer to this point again, when speaking of education, but it is in place here in connection with the hours of work.

The only interval regularly allowed for meals is at midday for dinner, and it varies from half an hour to an hour. I have most frequently met with 45 and 50 minutes. This, again, is significant. In England the dinner interval is always an hour; in Germany it is never less and often more; in America it is generally less. In England a pause is also allowed for breakfast; in Germany another is added for afternoon coffee; in America neither is observed. These small matters of everyday routine reflect the different spirit and method of working in each country; they are well worth noting, and perhaps more instructive than volumes of statistics.

There is, as I have already pointed out, a distinct tendency in the United States to shorten the hours of labour. The movement is clearly visible in the comparative statistics for 1890 and 1900 given in the Census Report (Special Report: Employees and Wages). The movement is not universal, for in some establishments the hours were longer

in 1900 than in 1890; but in the great majority of those in which a change is noted it is in the direction of shortening. The half-holiday on Saturday afternoon, which is statutory in a few States, is becoming more common, and the workpeople do not show any inclination to make up for it by adding to the length of the day during the rest of the week. In one large cotton mill which I visited the closing hour was 3.30 on Saturday instead of 6.30 as on other days. The management had tried the experiment of closing at 12.30 and making up for it on other days; but the hands preferred the 3.30 arrangement. The tendency towards shortening is probably strengthened by the statutory recognition of an 8 hours' day in public employment and some other occupations in many States. An abstract of the laws on the subject is thus summarised in the Massachusetts *Labour Bulletin* (January, 1904):—

> . . . There are twenty-seven States and territories, besides the United States, having an eight-hour day. There are six States where eight hours is prescribed as the limit for a day's work, unless specified to the contrary; these are Connecticut, Illinois, Indiana, Missouri, New York and Pennsylvania. Nevada and the United States specify the eight-hour day upon irrigation works and New York for labourers upon the reservoir. In Wisconsin the eight-hour day is prescribed in manufacturing and mechanical establishments, unless otherwise agreed upon. The laws of Missouri, New Mexico and Tennessee specify eight hours to be a day's work for labourers on road work. Eight hours is a legal day's work in mines and smelters in the following States: Arizona, Colorado, Missouri, Montana, Nevada, Utah and Wyoming. The following States prescribe eight hours as the maximum day's labour upon public works: California, Colorado, district of Columbia, Hawaii, Idaho, Kansas, Maryland (Baltimore), Minnesota, Montana, Nevada, Ohio, Pennsylvania, Porto Rico, Utah, Washington, West Virginia and Wyoming. The United States provides for an eight-hour day upon Government work.

The legality of the 8 hours' day has been repeatedly challenged as unconstitutional and has been tested in the courts of several States and in the Supreme Court of the United States with varying result. Thus—to mention some of the most important decisions—the constitutionality of

the law has been upheld in Kansas, Utah and Wisconsin, whereas the law has been held void in Colorado, New York and Ohio.

In several manufacturing towns which have adopted the 8 hours' day for municipal work, I found that factory hands were in the habit of seeking municipal employment in the slack season of the manufacturing year; and in some they were paid 8s. a day. The possibility of obtaining this rate of wages for 8 hours of unskilled labour can hardly fail to strengthen the demand for shorter factory hours without any diminution of earnings.

With regard to holidays, they vary considerably, according to local customs, in each country; but, on the whole, the most holidays are taken in England and the fewest in America. The statutory holidays in England are Christmas Day, Good Friday and every Bank holiday —namely, Easter Monday, Whit Monday, the first Monday in August and the day after Christmas Day. In Germany they are virtually the same, with the addition of New Year's Day and Ascension Day; the only difference is that, instead of the August bank-holiday, *Buss-und-Bettag* is observed in middle of November. This gives six days in England and eight in Germany, but they are supplemented by others in both countries. In England a week or ten days' holiday is often given at Christmas or at some other time, notably in August in the Lancashire cotton trade. In the Oldham district the workpeople subscribe so much a week to a club and draw the whole money out for what is called the "wakes week" in August. The mills close on a Saturday and do not re-open till the following Monday week. The hands all go to the sea-side. The holidays in Lancashire are eleven in the year. In Yorkshire the sea-side week does not obtain, but there are numerous local fairs which are

regarded as holiday occasions. The variations of local customs are such that it is difficult to make any general statement about the total number of holidays ; but, roughly speaking, the statutory days only represent half or less than half the actual holidays.

In Germany there are similar additions, varying in different localities. Each State lays down its own, and in particular districts old customs are observed in addition.

The prevailing religious confession is a factor of importance. Where the Roman Catholic element preponderates, some seven festivals of the church, distributed throughout the year, are observed in addition to those enumerated above. The holidays also carry with them a reduction of hours on the previous day in establishments in which women are employed, as the day must end for them at 5.30 P.M.

In the United States no day appears to be appointed as a universally legal holiday; but practically Christmas Day and Independence Day (4th July) are so observed. The other holidays most generally kept are New Year's Day, Washington's Birthday (22nd February), Decoration Day (30th May), and Thanksgiving Day (a variable feast). Then general election days are usually holidays, and "Labour Day," which occurs on different dates in September, is now statutory in most States. There is a considerable variety of other local celebrations, such as Lee's birthday in some of the Southern States, Lincoln's birthday in some of the Northern ones, Lexington Day in Massachusetts, San Jacinto Day in Texas, Pioneers' Day in Utah and so on. The marked feature of the list is the disregard of religious festivals, except Christmas, and the substitution of events in the history of the States. Inquiry in industrial centres led me to the conclusion that the actual holidays kept by

factory hands are rarely more than six in the year, and often less. Prolonged holidays consisting of several days together, and utilised for visiting the sea-side or the country appear to be unknown, except in the case of factories which close for a week or a fortnight annually for cleaning and stock-taking.

It remains to consider the bearing of the number of hours worked and the leisure enjoyed upon industrial efficiency.

One of the disadvantages which English manufacturers are often said to labour under is the longer hours worked by their competitors. I have shown that the hours are longer; but we cannot assume that this is a disadvantage. It depends upon circumstances. Probably no one will seriously deny that hours of work may be too long or too short.[1] They may be too long because human nature has limits, as the saying goes; rest and recreation are physiological needs; the brain cells, which are the motive power of all action, become exhausted and faculties fail after a time, with the result that bad work is produced. They may be too short, because the power present is not fully utilised, with the result that insufficient work is produced; in the end it would be bad work too, for powers disused atrophy and the less people do the less they can do. These are obvious truisms. The difficulty is to determine what is "too much" and "too little". It depends on circumstances, on the interaction of many factors, on the nature of the work, the demands made upon the worker, and his capacity to respond. Eight hours or less of some work may be quite exhausting, 12 hours of some other work may be easy; similarly, one set of men may get through as much in

[1] Except those who hold that work is a positive evil and the less there is of it the better.

8 hours as another set in 12. The arithmetical problems of one's youth depended largely, I remember, on some such assumption with regard to the relative capacity of A, B, and C. They were individuals, but similar national differences are commonly recognised and have been embodied in vulgar rhymes. One "jolly Englishman" is said, in his own country, to be worth a varying number of foreigners; and Americans have a still more exalted belief in their capacity to beat all other people in anything and everything. These humorous self-appraisements have a certain basis of fact which must be taken into account. The question is evidently complicated; but perhaps some general principle can be laid down. I beg to offer these suggestions: (1) prolongation of work becomes disadvantageous from the point at which the quality begins to fall off or the speed begins to slacken; (2) shortening of work becomes disadvantageous from the point at which full powers are left unutilised. Experience can alone determine when these points are reached. They will evidently vary in different branches of industry, in different countries and at different periods, as the pace of working changes with improved machinery.

Turning to the lessons of experience we have strong evidence of the advantage of shortening in the gradual substitution in England of 8 hour for 12 hour shifts, and in the tendency, noted above, towards reduction both in Germany and in the United States. This is, to a great extent, a voluntary movement on the part of manufacturers, and if they did not find it advantageous they would not follow it. Even in those cases in which employers have been forced more or less against their will to shorten hours, as, for instance, in the case of railway servants, it has been found advantageous, and no one proposes to return to the

old practice of keeping signalmen or engine drivers on duty for 20 hours or more. On the other hand we have examples of the economic advantage of longer hours in the success of the cotton mills in the Southern States, working 66 hours a week, against those in New England working 58. On this point I quote the following significant passage from Mr. Ashton, who represented the Lancashire cotton spinners in Mr. Moseley's party:—

> I was told there was no chance whatever for any further reduction of working hours in the States of Massachusetts and Rhode Island till the other States came down to their level in working hours, and of this there is no prospect whatever.

So, too, at the Trade Union Congress in the autumn of 1905 acquiescence in a resolution in favour of the 8-hour day was expressly refused on behalf of the Lancashire cotton workers on the ground that they could not afford to shorten hours until they were reduced in other countries.

The experience of the Bradford worsted manufacturers is in the same direction. They have found that the reduction of one hour a week enforced by the Act of 1901 has involved a distinct loss to them, equivalent to one week in the year or $\frac{1}{52}$nd part of the annual output.

These items of experience show how difficult it is to estimate the advantages and disadvantages of longer or shorter hours. That difficulty is increased when one country is compared with another. It cannot be assumed that because the 8 hour shift has been found advantageous in England it would be found equally advantageous in Germany. A question here arises which has a very important bearing on industrial efficiency, and this will be the best place to deal with it. I refer to the relative energy put into their work by the workers. This will obviously affect the number of hours which can be worked with advantage.

Among the suggested causes of American success none has been more prominently alleged than that the factory hands work harder and turn out more. The question was one of those which Mr. Moseley's trade union party was asked to answer. Tabulating the reports of the representatives of the manufacturing industries I get the following :—

QUESTION.

Does the American workman do more or less in an hour on an average than the English workman ?[1]

ANSWERS.

Blast-furnacemen—No.
Iron-founders—10 per cent. more.
Associated Iron and Steel Workers—No.
Engineers—Yes, in quantity, but quality inferior.
Shipbuilders and Boilermakers—No.
Shipwrights—No.
Cutlers—No.
Midland Metal Trades—
Cotton Spinners—No.
Weavers—No.
Boots and Shoes—Yes.
Leather Workers—Yes.

On the whole, it will be observed, the trade unionists do not admit that men work harder in America than in England; but there are some exceptions, and perhaps the admissions are as much as one has any right to expect in the circumstances. It is difficult for the representatives of English workmen, who are perpetually told that they are the finest and most industrious workers in the world and have nothing to fear from foreign competitors, to admit publicly that men work harder elsewhere; and great credit is due to those members of the party who have recognised the fact and had the courage to say so. For I am afraid

[1] The question ought to run, "Does the workman in America do more than the workman in England?" The form given to it above betrays ignorance of elementary conditions in United States factories.

there is no doubt at all that men do work harder in America. I agree with Mr. Moseley's trade unionists so far that the famous "hustling" is more talk than performance. I had the opportunity of closely observing it in operation on one occasion, and was considerably enlightened by an attentive study of the proceedings. It was in connection with some emergency street work and just the sort of occasion to give scope for hustling. The tram line was being relaid in Philadelphia at the point where the two principal streets cross and the work was being done against time at night. A force of about 150 Italian navvies was put on the job and the foreman was a man of colour. It was curious to see white men bossed by a black. He addressed them individually and collectively as "Charlie". The overseer was also on the spot, directing operations, and both talked a great deal. The foreman repeatedly assured the overseer that he was going to "get a big hump on" directly, and both incessantly exhorted "Charlie" to "get a move on there". Charlie was willing enough for his part, but the arrangements were faulty. The men had to fetch materials from a little distance and were perpetually in each other's way going and coming. They got through the job but in a muddled and far from expeditious manner. The "big hump" never realised itself; it was mere talk. I have often seen Italian navvies engaged on a similar task in London working much more expeditiously without any hustling; and workmen in America confided to me that the alleged expedition existed more in appearance than reality.

Nevertheless, all this being granted, I still maintain that workmen do work harder, and very much harder, in America; not in every case, but taken all round. It is not a conclusion derived from a limited observation only, but rests on the unanimous evidence of the most unimpeach-

able witnesses, corroborated by observation. American factories and workshops swarm with English workmen, foremen and managers. I have talked with many of them in different trades and different localities, and they all said the same thing. The only qualification I met with came from the English manager of a fine-spinning cotton mill in New England, who said that he could not get so much work out of the men in the hot weather as at home ; they drooped on account of the heat. Otherwise they all owned to working harder. The experience of American employers with men fresh from England and with men in England is all to the same effect ; the fact is a commonplace. The suggestion that English employers have everything to learn from America and English workmen nothing, that the latter are models of strenuous industry and the former languid drones is absurd. I do think that the employers have, or had, more to learn, but the men have their lesson too, and the prospects of English industry will be poor indeed if they do not learn it. The prevailing, though not universal, spirit at home is that of getting as much and doing as little as possible. The superintendent of some large American works in the North of England gave me his experience of native workmen. "They are not what I expected," he said ; "I find them very ready to ask for an increase of wages, but not to prove that they are worth it. When they come and ask me I say, 'Show me you are worth it and you shall have it,' but that is just what they don't do." In this frame of mind they go to America and start working ; but after a few months they fall under the spell of the prevailing spirit, and lay themselves out to earn all the money they can ; they extend themselves and put their backs into it, to use a rowing phrase, as they never did before. The Yorkshire manager of a carpet mill in Phila-

delphia, which was full of English workmen, illustrated the difference in these words: "There is no loitering to be as late as possible after the dinner hour, as in the old country; when the horn sounds every man will push out his handle, he is ready in his place beforehand". I have frequently seen them gathering at the door ten minutes before the dinner hour was over. The workmen cannot explain, though they admit the difference. I asked a man from Kidderminster in the same mill, as he stood at his roaring loom. I said: "You not only have longer hours here but you work much harder while you are at it". "Yes, that is so," he answered. "If you were asked to do half as much at home you would go out on strike." He laughed and admitted it. "How is it, then?" He scratched his head and could not tell.

I know how it is, but this is not the place to enter into that. I am here merely insisting on the fact that men do work harder in America, and the digression has already led me too far from the thread of my argument. I do not say this way of working or its causes are entirely admirable and to be imitated; but they exist and they have a bearing on the question of hours. My belief is that with such a rate of work the longer hours, though advantageous in some respects, are disadvantageous in others. As I have said in a previous chapter, the great defect in American work, if some special products are put aside, is want of finish and inferior quality. When, or if, that is overcome, American competition will be much more formidable than it is now. And that defect is mainly due to the pervading hurry. All that employers and employed care for alike is the output; they work fast and they work long to get the quantity. Mr. G. N. Barnes points out the distinction between quantity and quality in his report as a member of

the Moseley party, and I believe his is the true answer to the question of working harder. Now, to work long as well as fast is hardly compatible with good finish; and it is the fact that shorter hours prevail in some notable establishments which turn out first-class work. It seems reasonable to connect the two. If, therefore, English manufacturers are handicapped in some branches of industry by the longer hours in America, I submit that the contrary holds good of other branches.

The same argument is not equally applicable to Germany. The more leisurely method of working which prevails there makes long hours compatible with finish and quality, and does not overtask the workers. Thus quality may be combined with quantity, though at the sacrifice of leisure for other occupations. I have little doubt, however, that German manufacturers would find shorter hours economically advantageous; they are, in fact, finding them so. It is not solely a question of quality or finish. Work may lag in general if continued too long, as in the twelve-hour shift. The eight-hour shift has unquestionably proved economically advantageous in England.

To sum up, so far as the hours can be treated as a separate factor without reference to wages, I should say that on the whole the shorter hours worked in England make for efficiency and are of advantage provided that the time is fully and faithfully utilised by strenuous application. If it is not then they are a handicap on English industry, which stands to be beaten on quantity by the more prolonged labour of both competitors. How to secure that strenuous application is the problem for this country; how to shorten hours without loss is the problem for Germany; and how to improve quality without sacrificing output is the problem for America. England, I venture to

think, has here the simplest task of the three, though it may turn out the most difficult.

The general tendency to shorten hours will doubtless continue. Apart from the efforts of organised labour and sympathetic reformers to effect reduction as a thing desirable in itself, it will be inevitably brought about by economic pressure, if the principles I have stated are correct. For mechanical invention constantly increases speed of working, which in turn involves more constant and concentrated attention, making greater demands on the brain; and as the demands increase the time during which they can be fully satisfied without exhaustion diminishes. In other words, extent varies inversely with intensity. A reduction of hours becomes a condition of efficient work and is therefore inevitable in many branches of industry. But in those in which there is no change of intensity, such as ordinary unskilled labour, reduced time may mean diminished efficiency.

CHAPTER VIII.

WAGES.

If it is difficult to make precise comparisons with regard to hours it is infinitely more difficult to make them with regard to wages. This subject is so complicated as to fill the student with despair. There is, first of all, immense difficulty in getting accurate information at all. Are you to rely on the payers or the paid? Their accounts rarely agree and often differ enormously. The former have the highest payments most in mind, the latter have the lowest receipts. "My men earn up to such and such a figure," says the employer. "Some of the men are only getting so and so," says the employed. Hence many disputes. Undoubtedly the employer knows best; he keeps the pay rolls. These are the best sources of information if they are accessible, which is not often the case. The details given by the United States Census' Office[1]—by far the fullest statistical statement yet compiled upon the subject—were obtained from the pay rolls and are of the greatest value. But they only represent earnings, not rates of payment; and there is a vast difference between the two. Earnings are the important matter from the social, rates of payment from the economic point of view; the one reflects the well-being of the workmen, the other the wages cost of production to the manufacturer. Both are sur-

[1] *Twelfth Census*, "Special Reports: Employers and Wages," 1903.

rounded with difficulties. Earnings are subject to fluctuations from many accidental conditions, which are lost from view in the average. For instance, if the pay rolls of two similar establishments engaged in the same trade be examined, it may be found that the men employed in A receive an average of several shillings more in the week than the men in B; but the real explanation may be, not that they are better paid in A, but that in B several old hands are kept on, more from kindness than for business; and their almost nominal earnings bring down the average. Then there is over-time and short-time. On the piece-work system of payments a series of factors ought to be taken into account in comparing earnings, such as hours worked, class of work on order, efficiency of plant, quality of material supplied and other indeterminate conditions. Rates of payment look more precise than earnings, but may be equally misleading. For instance, one manufacturer may pay a considerably higher rate than another and yet produce at a lower wages' cost, because the output is larger in the same time. Again, it looks a simple matter to compare rates in those trades, such as spinning or weaving, which have a fixed price list; but the method of computation is generally so complicated and varies so widely as to make comparison impossible. In short, the money factor cannot be separated from other conditions and taken by itself. No doubt it could if other things were equal; but they never are equal.

Another source of difficulty is that men doing the same work in the same country are paid very different wages in different parts. In the United States men are paid in some States more than twice as much as in others for the same work; in Germany I have found 36s. a week being paid in Rhine-land and 21s. in Saxony for the same work; and in

England the actual trade-union rate for fitters ranges from 23s. to 41s. a week; and, of course, where different trades are taken, the variations and complications are much greater. It seems to me, therefore, most unsatisfactory and misleading to lump them all together and produce a fictitious person called the "average" workman. The objection to this method of comparison is heightened by the false air of precision assumed by the result. It satisfies the craving for a simple summary statement, as I have said in the last chapter; but it may be very far from representing the truth. The best way of stating the facts for purposes of international comparison would be to take a number of the leading competing industries and give the range of weekly wages paid in the representative centres for each trade. Sufficient *data* are not available for doing this in a fairly complete way; but there are some, and we must do the best with them. But I will first endeavour to satisfy the desire for a summary statement, not by creating an imaginary average workman, but by taking the wage paid to the unskilled day labourer, who occupies the same position in every country. This has been suggested to me by both employers and employed as the best measure of summary comparison. Accordingly, I made inquiries in every industrial centre visited, with the following result:—

Daily Wage of Unskilled Day Labourer, Winter of 1902-03.

England.	Germany.	U.S.A.
3s. to 4s.	2s. 6d. to 3s.	3s. to 7s.

It is to be noted, in the first place, that at the time these figures were obtained England and Germany were suffering from severe depression, causing an excess of supply over demand in labour, whereas the United States labour market was in the flood-tide of prosperity. If the German figures are thought too high, I would observe that they have

official authority. The current rate of wages paid to the ordinary day labourer in each locality has to be officially declared as the basis of assessment for the State Sick Insurance; and the Ministry of the Interior periodically publishes a return giving any changes that may occur. It is true that a much lower rate than that I have given—down to 1s. 2d. a day—is current in some localities; but that holds good of the other countries also. I am only dealing with manufacturing centres, and the localities included for comparison are as nearly as possible similar and comparable. Indeed, I should say that 3s. is less exceptional in urban industrial Germany than 4s. in England and 7s. in the United States. I only met with one instance of each, namely, at Newcastle-on-Tyne and at Pittsburg respectively. The wage most frequently paid in the class of towns with which I am dealing was 3s. 6d. in England and 5s. in America; and I think these may be fairly taken as averages. If the corresponding German average be taken as 2s. 9d.—and it should not be less—we get the following ratios:—

England.	Germany.	U.S.A.
100	78·6	142·8

These figures are curiously near the only ones I have which give a complete and accurate comparison of the wage rate for a particular industry in all three countries. They were furnished to me by Sir John Brunner and they represent the ratio of wages in the alkali manufacturing industry. They are as follows:—

England.	Germany.	U.S.A.
100	78	135

For Germany, it will be observed, the figure is almost identical with mine. This confirms me in my belief that mine is not far from the mark, for the alkali works are not

situated in that industrial district where the highest wages are paid. The ratio for the United States is somewhat lower than mine, but the difference is not very great and can be accounted for in several ways. At any rate the two are near enough to corroborate each other in a striking degree, when it is remembered that comparisons of this kind must be read broadly with a liberal margin. I doubt if it is possible to get a summary statement much nearer to the truth, and I am satisfied that the ratios given above represent the actual state of things far more accurately than those given in the Blue-book issued by the British Board of Trade in 1903.[1] The latter were compiled from a number of quotations derived from different sources between 1898 and 1902, and have reference to fifteen skilled trades. They are as follows :—

	United Kingdom.	Germany.	U.S.A.
Capital cities . .	100	57	179
Other cities and towns	100	63	193

The figures for the United States are too high and those for Germany too low. The fifteen skilled trades include the building and furnishing trades which have no bearing on international competition, and they exclude all the textile industries. But taking the manufacturing metal trades that are given I find the following "average of rates of wages current" in provincial towns in Germany : Turners, 20s. ; fitters, 20s. ; smiths, 21s. 7d. ; pattern makers, 21s. ; brass moulders, 19s. 11d. I cannot accept these figures as an average, for I have not found men receiving so little in any manufacturing town, and in the principal engineering centres workmen belonging to the trades cited were gener-

[1] Cd. 1761. Memoranda, Statistical Tables and Charts, prepared in the Board of Trade with reference to various matters bearing on British and Foreign Trade and Industrial Conditions, 1903.

ally in receipt of from 27s. to 36s. a week. If the Board of Trade figures for Germany were given as the minimum they would be nearer the mark. Those for the United States appear to be similarly too high. I compare them with the statement of Mr. G. N. Barnes, secretary of the Amalgamated Society of Engineers. He is a good authority because his society has branches in America, and his report, as a member of Mr. Moseley's party, is conspicuous for acute observation and unbiased judgment. "The base rate of wages in America," he says, "as compared with Great Britain is, I should say, about 35 to 45 per cent. higher for operative engineers." This, it may be observed, is in entire agreement with my own and Sir John Brunner's ratios given above. Mr. Barnes adds, however, that the maximum wage paid in America probably runs up to 70 per cent. higher than in Great Britain. Now the average excess of American over English rates given in the Blue-book for the engineering trades is as follows :—

	Capital.	All other Towns.
Turners	86 p.c.	51 p.c.
Fitters	64 p.c.	51 p.c.
Smiths	64 p.c.	108 p.c.
Pattern-makers . . .	79 p.c.	86 p.c.
Brass-moulders . . .	108 p.c.	84 p.c.

The discrepancies between these figures and Mr. Barnes's estimate are too great to be explained away; and the capricious and unintelligible variations shown in the table—compare, for instance, the position of the fitters and smiths—suggest that they are based on inadequate *data* and untrustworthy.

A more recent comparison is contained in the volume prepared by the Bureau of Labour in Washington for the exhibition at St. Louis in 1904.[1] Details of wages are given

[1] *Bulletin of the Bureau of Labour*, No. 54, September, 1904.

for thirteen occupations in different countries from 1890 to 1903, and a summary comparison is made for the year 1903. Several of the occupations belong to the building trades; but four are valid for my purpose, thus:—

	England.	Germany.	U.S.A.
Blacksmiths . . .	100	71	169
Boilermakers . . .	100	65	165
Machinists	100	78	161
General labourers . .	100	78	164

These figures come very much nearer my own and Sir John Brunner's standard than those of the English Blue-book cited above. The relative positions assigned to England and Germany in two of the occupations is identical, and in the other two it does not differ widely. The discrepancy is greater in regard to the United States, but still much less than in the estimate previously quoted.

The figures hitherto cited have to do with wages based on time rates. I had some hopes in beginning this inquiry of being able to get schedules of rates in different classes of piece-work, which would enable one to make an exact comparison; but I have been wofully disappointed. Price lists are made up so differently in different countries and are conditioned by so many subsidiary factors that no such comparison is possible. A comparative estimate of earnings, however, can be formed in certain occupations. The most accurate figures I have are for cotton weavers.

Cotton Weavers.—The average earnings of weavers (male and female) in Bolton and Blackburn are 23s. a week; at München Gladbach they are 21·6s.; at Lowell 28s. There are cotton towns in the United States where the wages are higher than at Lowell, but also ones where they are lower. The United States Census[1] gives the following "medium earnings":—

[1] "Special Reports: Employees and Wages," 1903.

Cotton Weavers U.S.A.

	Medium Weekly Earnings.	
	Males.	Females.
North-Eastern States	36s.	30s.
Middle States	32s.	24s.
Southern States	18s.	14s.
All sections . . .	30s.	26s.

This gives a rough mean of 28s. for all weavers, which happens to be exactly the same as the figure I obtained from an excellent authority in Lowell. Reduced to percentages they stand as follows :—

England.	Germany.	United States.
100	93	121

The figure for Germany is probably too high for an average, as there are other centres where wages are lower, and none, I believe, in which they are higher. But when allowance has been made for this, it will be seen that in this standard industry the difference between the three countries is not very great. The mean hours in which these wages were earned were 55 in England, from 58 to 60 in Germany, and from 60 to 61 in America.

Woollen Weavers.—In England the weaving is chiefly done by women, and therefore I will take them. The figures I have are these : average weekly earnings in England, 18s., in Germany, 14s., in U.S.A., 32s. This gives the following percentages :—

England.	Germany.	U.S.A.
100	77	177

The hours worked in this case were 54 in England and Germany (namely, short time), and from 58 to 59 in America. If male weavers are taken the result is different, for it is a curious fact that in America female weavers earn nearly as much as male (the median weekly earnings, according to the census, are 32s. for women and 34s. for

men), whereas both in England and Germany the men earn considerably more. The proportional figures for male weavers are

England.	Germany.	U.S.A.
100	80	135

This result corresponds very closely with the estimates with which we started. I might give some more figures to much the same effect, but I do not think it would serve any good purpose. I deprecate any pretence to exactness on the point. The more the subject of wages is studied the more intricate it appears to be, and the greater the difficulty of making exact statements. If details were available for other countries as full and authoritative as those for the United States, a fairly precise comparison might be possible ; but without them it is better not to pretend to a fictitious precision, and to rest content with some rough generalisation. The one I suggest for a sort of working comparison to bear in mind as approximately true but subject to many qualifications and exceptions, is that in Germany wages in manufacturing industries are about $\frac{4}{5}$ths, in America about $\frac{7}{5}$ths, of the English standard. In other words, they are in America nearly twice as high as in Germany, and nearly half as high again as in England.

So far as workmen are concerned, such a comparison possesses no significance apart from the purchasing power of money and the cost of living, which is discussed later on. So far as employers are concerned, differences in the price of labour must be read in relation to a number of other factors, some of which cannot be measured or counted. The economics of wages are, indeed, even more intricate and indeterminate than the facts. A very instructive comparison, kindly furnished by Sir John Brunner, will show the extreme difficulty of formulating a conclusion. The

relative rate of wages paid in the alkali industry, as I have already stated, is: England, 100, Germany, 78, U.S.A., 135; but that does not represent the labour cost of a given quantity of output, because the number of men required to produce it also varies. The comparative number of men employed for equal output is 110 in America and 131 in Germany for 100 in England. Thus we get the following result:—

	Men.	Wages.	Cost Per Ton.
England	100	100	100
Germany	131	78	102
U.S.A.	110	135	148

This is most interesting. I asked Sir John Brunner if the difference in the number of men required is due to superior capacity or to some other condition, and he replied: "The difference in the output per man is very largely but not entirely due to a difference in capability. To a small extent it is due to labour-saving machinery." Here we have an English manufacturer enjoying an advantage of nearly 50 per cent. in wages cost of output over his American competitor, due in part to lower wages, in part to the superior capacity of the men and in part to superior machinery. His advantage over his German competitor, though much greater in regard to the men, is reduced almost to vanishing point by the lower wages paid by the latter. One of the most interesting features of the comparison is that the English works have the eight-hour and the others the twelve-hour shift.

I think it will be generally admitted from a consideration of this case that the philosophy, if I may use the term, of hours and wages, or their economic bearing, is a most intricate problem. If other cases were taken it would appear still more intricate. It would be a great mistake to generalise from a single experience and say, for instance,

that shorter hours and lower wages both confer an economic advantage. With the first I have dealt in the previous chapter. The alkali case illustrates what I said about the disadvantages of longer hours, particularly in relation to the twelve-hour shift. One is clearly entitled to draw that inference from the fact that, in spite of the higher pay, it takes eleven men in America to do the work of ten in England. They doubtless flag. That it takes two more in Germany is probably explained by their more leisurely method of working. So far as hours are concerned, therefore, the lesson to be drawn is in accordance with the principles already laid down and of general application. But the same cannot be concluded with regard to wages. Granted that in this case the German manufacturer is helped by low wages and the American handicapped by high ones, it is not permissible to draw the general conclusion that lower wages are always a help and higher ones a handicap.

Once more we are driven to the Aristotelian mean. There is excess and deficiency of wages, as of hours. I know that some economists are ready to prove that in the end wages are entirely regulated by the law of supply and demand, like the price of other things. In the end, perhaps, they are, but it is one of those ends that never come, which is another way of saying that within the law there is a margin —a considerable margin—for variation which is determined by other factors. Far be it from me to cavil at anything so venerable and imposing as the law of supply and demand or to deny that it applies to labour as to other commodities. Broadly speaking, the price of labour rises when and where demand exceeds supply and falls under opposite conditions; but the actual level is often determined by other factors. Apart from that, however, and within the

operation of the law, a fallacy is often concealed by external appearances or by words. Labour may be plentiful and cheap, but it may be bad economy to buy it cheap. For what an employer wants is not labour but the result of labour, and if he buys too cheap he will not get it; just as a man who buys a coat may buy too cheap. What he wants is not a coat, but warmth or the result of a coat, and if he buys too cheap he does not get it. Cheap labour may be dear through want of capacity or of will. The former is generally recognised, but the latter is often overlooked. Wages are the incentive to work, and must be adequate to produce it. This is the real meaning of the "living wage". Men may be forced by their necessities, in accordance with the law of supply and demand, to work for wages below a standard which they consider acceptable and call a living wage. Some term this the "higgling of the market," and uphold it as based on economic principles; others call it "sweating," and denounce it as opposed to human principles. There is a great deal in a name—a great deal of prejudice, blindness and confusion of mind. The economic and the human principles are really the same, because economics deal with human beings, which economists often forget. Labour so purchased is apparently cheap, but being unwilling it is really dear and false economy.

Adequate wages are a good investment not only for the employer, but for the country. They increase national strength. Let me give an instance.

When one of the transports was leaving the Albert Dock on the Thames, in the early stages of the South African war, an elderly docker, who had been working on her and stood by me as we watched her pass into the river amid cheers for the troops who crowded her deck, said to me: "We've got to see this thing through, and, dammy, I'd go

myself sooner than this old country should get knocked. If we don't see it through every foreigner will spit in our faces, and we don't want this country to be governed by foreigners. It is a good country, where a man can earn a fair day's wage." Now that is the spirit which pulled us through the war and it never wavered or faltered for a moment among the mass of the people from one end of the country to the other. It had nothing whatever to do with politics. The people took no interest in the matter until Mr. Kruger's ultimatum and then they saw instantaneously that if we did not "see it through" every foreigner would "spit in our faces". And they were content enough with the country to find it worth fighting for, down to the very lowest class of labour, to which my friend belonged. It was willing service that they gave and therefore good value for the money.

What applies indirectly to the country applies directly to industrial concerns. Wages, I repeat, are the incentive to work, and if the work is to be adequate the incentive must be adequate. Employers often fail to realise this. The complaint of the men is well founded. A manufacturer, hard pressed by competition, seeks to reduce cost of production, and the item which lies readiest to his hand is the wages bill. He cuts it down or tries to cut it down. The step may be unavoidable; it sometimes is; but often it is not, as the result of some of the greatest strikes has shown. It is truer economy to make it the last instead of the first thing to touch. A German textile manufacturer recently worked the thing out for me in figures. I did not put it to him in that way, but I asked for some information which led him to make a minute analysis of the cost of production in his business. The result surprised him, and he told me that manufacturers in the same branch of in-

dustry have only the vaguest idea of the relative importance of the many items that make up the cost of production. It is a complicated and laborious task to work them out in exact detail, and he had never attempted it before. He found that a 10 per cent. reduction of wages was only equivalent to one farthing a yard, or 1 per cent. in the price of the finished product. The conclusion he drew was that wages were the last thing they ought to touch in attempting to reduce cost.

I submit, then, that wages may be too low—economically too low, I mean, because humanly too low. But they may also be too high, economically and humanly. They are obviously too high in the American alkali industry, cited above, and in some other American industries. Shipbuilding is a conspicuous example. American shipbuilders cannot compete mainly because of the excessive cost of labour. Mr. D. C. Cummings, of the Iron and Steel Shipbuilders and Boiler Makers' Society (British Trade Union), states that the average wages of time workers in American yards are 75 to 100 per cent. higher than in British yards,[1] which contrasts remarkably with the 35 to 45 per cent. of Mr. Barnes in the closely allied engineering trades. I do not know why labour should be so disproportionately dear in American shipbuilding; perhaps it is because most of the work is of a highly skilled character and the supply of competent immigrant workmen is less than in other trades because they have plenty of work at home. There is, however, no doubt about the economic disadvantage which is entailed in this case. Another instance is afforded by the cotton mills of Massachusetts. The great strike at Fall River in 1904, described as "the greatest disturbance which the textile industry of America has ever known,"

[1] Report of the Moseley Commission.

was due to the necessity of reducing wages. The employers contended that they had for a long time made no profits, or were actually working at a loss, and they proved the case from their books. It was proved still more conclusively, to my mind, by the result; for after holding out for six months the men accepted a large reduction.

In saying that wages may be too high humanly I refer to the moral effect on workmen, who may get spoilt and become lazy. I draw an illustration from the same field as that used to illustrate the advantage of adequate wages. When the despatch of troops and guns to South Africa was being carried on at high pressure, a number of dock labourers at the Albert Dock, who were being paid two shillings an hour for merely sweeping, refused to work any longer one evening on the ground that it was raining or too cold, I forget which. I witnessed this incident myself, or I should have some difficulty in believing it. But "spoiling" is a familiar process of daily occurrence and workmen are no more exempt from it than any other class. It is seldom taken into account in their case because they are not supposed to reach that level of financial surplus at which spoiling begins. In the main that, no doubt, is so; and the point at which industrial efficiency is impaired by failure of incentive occurs more often through deficiency than through excess of gains. But the latter does occur. Welsh miners, who only care to work three or four days a week, because they earn in that time as much as they want, are an instance. Playing two or three days a week in addition to Sunday may be defended on other grounds; but I am concerned with industrial efficiency, and it cannot be denied that a man who works six days a week is industrially more efficient than one who works four days, provided that the rest is not needed to recruit exhaustion; and no

one pretends that it is. Similarly, men working on a minimum time-rate, who refuse to increase their pace, when they could easily do so, in order to earn a higher wage, are less industrially efficient than those who increase it. The incentive fails with them, and they are clearly overpaid, from the point of view of efficiency, for if they were not, the incentive to exertion provided by the chance of earning more would operate.

Wages, then, may be too high or too low. The standard constituting the mean between excess and deficiency is evidently not determined by some universally operating economic law, except in that end that never comes; for if it were the mean would always be reached, whereas we know that the actual conditions diverge frequently and extensively on one side or the other. Doubtless many factors are concerned and among them not the least important is the character and temperament of the workmen. The standard will obviously vary with different individuals and different races as well as with different external conditions. The more active and ambitious a man is the higher the incentive that he needs and can bear. This brings us to the question of the mode of payment or of remuneration, which is not less important than the amount.

It follows from what has been said that differentiation is necessary for securing efficiency. There must be some means of adjusting the incentive to the individual. If a number of men differing in capacity are all paid at the same rate some will certainly be underpaid and others probably overpaid. I have no doubt at all that many men in England are underpaid. By underpaid I mean that the incentive is inadequate to get from them the best of which they are capable. There is nothing sordid in this. No man works—or does anything else for that matter—with-

out an incentive; and I am not at all sure that money, up to a certain point, is not just as "high" an incentive as duty, self-respect or pride in work; indeed it is identical with duty and self-respect, for a man's first duty in this world, be the next what it may, is to earn his own living. And even those who take a pride in doing good work for its own sake are helped and stimulated by the recognition implied in higher pecuniary rewards. It is, therefore, no reflection on any workmen to say that they would work better if they were better paid. And many workmen in England are in that position. I should not venture to be so positive about it if I had not good warrant for the opinion from the quarter where it would be least expected. In the ship in which I came over from America there happened to be five English manufacturers, who had been in America partly on business and partly for the purpose of studying industrial conditions like myself. They represented iron and steel, small arms, cotton, wool, and, I believe, machinery. I am not quite sure about the last, but at any rate they included several great industries. One of them had large interests in cotton-seed oil mills in the States. They were good enough to invite me to a conference on the subject of English and American industrial methods; and we discussed it for a couple of hours. Among other things I asked this question, "How are you to get more work out of the men at home?" and the answer came prompt, "Pay them better".

This unequivocal answer entirely agreed with what I learnt from English workmen in America, with whom I had many conversations in different places and various industries. They fully admitted putting more energy into their work than at home, but were somewhat puzzled to explain it. When closely questioned, however, they always

came back to the earnings and one man put his finger very neatly on the central point. He admitted that the higher cost of living swallowed up the greater part or the whole of the difference; "but," he said, "they like handling the money". That is according to human nature and a true diagnosis.

But to apply the lever with advantage it must be properly adjusted. If wages are to secure or increase efficiency they must be earned. Here lies the difficulty which is at the bottom of nine-tenths of the labour troubles. Wage-takers are always ready to handle more money, but they are not always ready to earn it, particularly in England. The criticism of his English workmen, made by an American manager and quoted in the last chapter, will bear repeating: "They are always coming and asking for an advance of wages, but they are not so ready to earn it. I say to them 'Prove to me that you are worth it and you shall have it,' but that is what they won't do." On the other hand wage-payers are always ready to get more result from the workers, but not so willing to pay for it. Hence a perpetual struggle. It is bad economy, whereby the strength of both parties is wasted. The ideal condition, economically, would be an automatic mechanism which would exactly adjust the incentive to the individual or the wages to the work, thereby eliciting the best of which each is capable. This would be equally advantageous to the wage-taker and the wage-giver and to the community to which both belong, because there would be no waste. Its perfect realisation in industry is no more practicable than any other sort of perfection, but some methods of remuneration come nearer to it than others, and their comparative bearing on efficiency can be gauged accordingly.

It is obvious that of all methods the furthest removed

from the ideal is that of time wages at a uniform rate. It pre-supposes an equality which has no existence, and it is therefore based on a false principle. The more skilled the work the more false the principle. That becomes clear if the most highly skilled occupations, which are those requiring the greatest mental effort or the rarest natural gifts, are considered. In these the reward transcends pecuniary remuneration altogether and cannot be measured at all; it is purely personal. When power and fame, the approbation, the confidence or the love of one's fellows, the satisfaction of conscience and the sense of duty are among the earnings, the very idea of equality is out of the question; it becomes unthinkable. The individual diversity thus plainly revealed in the higher occupations and their rewards extends in some measure throughout the scale, but becomes less as we descend into the regions of manual labour until we reach the lowest strata of unskilled work. Here there is least room for variation in the value of services rendered, and therefore least waste of potential energy through failure to elicit it by varying incentives. In the most unskilled labour the value to the community of one man who can do the work at all is most nearly the same as that of another, and a uniform scale of payment by time is therefore least uneconomical. In proportion to the departure from that standard it becomes more and more uneconomical. To condemn any men to it who might be subject to another system is to mark them with the brand of inefficiency. The *minimum* time wage is itself a sort of tacit and unconscious protest against a uniform rate, for a *minimum* implies possible variations which are not to sink below but may rise above. In short, time-work should be avoided whenever possible, unless it be adjusted to individual capacity in the manner presently explained.

Piece-work, on the other hand, is as obviously based on the sound economical principle that workers should be paid according to the value of their work. There is and can be no valid objection to the principle as such, but in practice it is less satisfactory. The invincible dislike of piece-work often shown by workers is not without justification. They complain that when a man increases his output by working harder, the employer cuts down the price and reaps the benefit ; and it cannot be denied that this has often been done. Such conduct strikes a fatal blow at efficiency ; it falsifies the whole principle of piece-work, destroys the capable worker's incentive and takes the heart out of him. Sometimes a trade union fixes a maximum day's work in order to avoid inviting a cut, and it is quite justified in doing so. One remedy is a standard price-list fixed by mutual arrangement and only modified by mutual consent. This generally presupposes organisation, and the difficulty or impossibility of securing it without, is a very strong economic argument for trade unions. A second ground for objecting to piece-work is that, even with a fixed price-list, bad material or machinery may render it illusory in practice. Other grounds are less justifiable. One is sheer laziness. The shirker, who habitually does as little as possible, is at a disadvantage when earnings depend on work done. He prefers time-work, which he can reduce to time-waste, as far as supervision will allow him. The building trades offer the most conspicuous example of this kind of inefficiency, and it is noteworthy that labour disputes are far more frequent in them than in any other branch of industry. A theoretical objection to piece-work derived from vague socialistic notions of equality, looks better, but is really based on the same motive. It professes the aim of preventing compe-

tition and jealousy between workers, but this is the same thing as depriving the more capable and industrious of their qualities and bringing all down to the level of the least capable or industrious. That is not only false economy, but tyranny and injustice. It is idle to put forward such objections to piece-work in the face of its satisfactory working in innumerable flourishing trades. The industrial value of the piece-work method of payment is, I think, clearly shown by the fact that it obtains in those branches of industry in which England retains her superiority, whereas time-work is more common in those wherein she has been caught up and surpassed. Two prominent instances will suffice to illustrate the point, and they are the two greatest of industries—cotton and engineering. I do not suggest that labour efficiency is the only factor, but no one can deny that it is one of the most important; and I do suggest that where the wage incentive has been of such a character as to stimulate the workers to do their best, there the lead which England gained long ago has been maintained, not unimpaired, but still maintained; whereas, under the ordinary time-work system, which does not provide that incentive, but discourages effort, the once still greater lead has been entirely lost.

The inference is strengthened by the results of intensive piece-work wherein the stimulus of ordinary piece-work is increased by additional rewards. It takes different forms, but generally consists in paying each worker a higher price for each piece or job in proportion to the rapidity and quality of his workmanship. This automatically adjusts the incentive to the individual who has before him the choice of earning more or less according to capacity and industry. It is undoubtedly a most effective method of payment; it encourages workers to do their best, remun-

erates them directly for extra effort, pays the employer and benefits the whole concern on which both depend. The employer is able to pay higher wages for quicker work, because he gets a larger output for the same machine cost. He divides with the worker the advantage accruing from the difference.

A striking illustration of the successful application of the method is furnished by the cotton trade. Oldham is by far the greatest cotton-spinning centre in the world, and its prosperity in recent years is generally attributed to the adoption of a speed list in 1876. Payment is by result, calculated from a certain standard of speed, namely, 3 draws in 50 seconds; for each second less so much is added to the earnings, being one-half the advantage of the difference arising from the increased speed. At Bolton the price-list is calculated in a different way, but the same principle enters into it. I have said before that no workers in the world surpass the Lancashire operative spinners in skill and industry; no other spinners can compare with them. It is impossible to doubt that the incentive offered by the method of payment is largely responsible for their extraordinary efficiency and consequently for the retention of superiority in this great industry. It is responsible for another thing, and that is smooth working and the avoidance of disputes. With this example before us it is idle to talk, on the one hand, of piece-work as essentially bad for the workers, or, on the other, of trade unions as bad for industry, for the Lancashire cotton spinners are the most highly organised of all workers.

Piece-work is not applicable to all trades; that is to say, it is not convenient to calculate wages on that basis, though of course in all cases the thing paid for is the result, not the time spent on it, and in time-wages some

estimate of the piece value of time is implied if not consciously realised. When machinery is running the ratio between time and result is generally regular enough to permit of its being reduced to a formula by a careful analysis of the operations. If this be done each can be expressed in terms of the other, and then the intensive or differential rate can be applied to time-work just as well as to piece-work. The two are interchangeable. In the Oldham spinning mills the output is calculated from the time and the differential rate is assessed by extra speed, so that actually time wages are paid for piece-work. It is possible to reverse the process and pay piece wages for time-work. This is, in effect, what is done under the premium or premium bonus plan, which is now largely adopted in engineering and machinery works. The men are normally paid so much by the day or week, that is to say, they are on time-work, and in England, at least, they have a standard week's wage. This implies a certain output. All that has to be done to apply the intensive principle is to fix the relation between time and output more precisely and to offer additional pay for curtailment of the standard time required for a given result. The principle is exactly the same whether the measure be the piece or the time; in the one case the premium is paid for more output in a given time, in the other for less time expended on a given piece. The difference lies merely in the method of calculation, which depends on the nature of the work.

These several modes of payment, however, do not exhaust the question of remuneration, and it is necessary to consider what is commonly called "profit-sharing".

The term is generally applied to the distribution among wage-earners of part of the net profits of an undertaking, but this use conceals an economic fallacy. The conception

of "net profits" is bound up with the old fallacious view that the remuneration of labour is on the same footing as the cost of raw material, power and plant—a fixed charge in the cost of production, which is to be kept as low as possible. It is fallacious, because it ignores the human element, and in practice it has long been abandoned. All changes, up or down, in rates of wages, made on the ground of the state of trade, whether by sliding scales or conciliation boards or simple demand on either side, rest on the principle of profit-sharing. So does a general bonus on the output.

The truth is that every productive concern, carried on by more than a single individual, is, in fact, a co-operation or co-partnership; the several persons combine to produce a certain result. Before the rise of the "factory system" it was not so. A manufacturer gave out materials to various individuals who worked on them at home and sold the result to him; their relations were purely commercial and individual; there was no more common interest than in any other buying and selling transaction. In modern manufacturing a varying and often a very large number of persons are engaged together on a common object. The "factory system," so far from being the enemy of collective industrial action, is, in truth, its realisation. When that fact is generally recognised we shall be on the road to a just and therefore stable adjustment of industrial relations. And we are coming to it, of which profit-sharing is a sign. In practice, when properly carried out as it has been in a number of cases, it merges automatically into co-partnership; there is no fundamental distinction between the two, only one of degree.

At present, however, the meaning and function of profit-sharing is often imperfectly or erroneously understood. It

is considered as an alternative to wages, or an act of benevolence, or a means of reconciling the recipients with otherwise unsatisfactory conditions. The existence of the last view among employers is the cause and justification of the half-instinctive but determined dislike and suspicion of profit-sharing entertained by many workmen, who are enthusiastically in favour of co-operation or co-partnership. *Timeunt Danaos,* and not without reason. It is a bogus profit-sharing that they fear; the genuine article is co-partnership, in some degree at least. Thus, the Gas Workers' Union in England was bitterly opposed to the profit-sharing scheme introduced by the South Metropolitan Gas Company, but the opposition died away when it was perceived that the scheme was really co-partnership, involving not only a share in the property, but a voice in the management,[1] while leaving the wages intact.

Regarded in this light, profit-sharing is seen to be neither a benevolent dole nor a substitute for wages, but a completion of them, and as such it serves a particular function in the conduct of an industry. It does not affect the principles previously discussed; in particular it does not replace the adjusted incentive. That becomes quite clear if we examine profit-sharing in its most complete form, namely, that in which the workers are the sole proprietors and all on an equal footing; they thus pay themselves out of the profits, which are either equally divided or not. If the former, then the state of things is reproduced in which the more capable receives the same remuneration as the less. It is not so bad economically as the ordinary capital-and-labour time-wage condition, because the earnings of all alike depend directly upon their own exertions;

[1] This does not mean interference in the management of the works, which no shareholders possess, but representation on the board of directors.

but it does not differentiate between individuals according to capacity. This is, no doubt, a merit from a certain point of view, because it tends to that equality for which socialistic theory yearns. I am, however, concerned not with an ideal, but with the actual state of things, in which men are neither equal nor content to be treated as if they were. Suppose—and it is not a far-fetched supposition—that A, B, and C co-operate, and A does as much work as the other two, but only receives the same share of profits. In that case he does not get what he earns, while B and C do not earn what they get. It is not a stable arrangement, and sooner or later the economic principle of the adjusted incentive asserts itself. A either insists on having a larger share of the returns or he declines to do more work than B and C, and his efficiency is impaired. In other words, the wage question still crops up. If the profits in such a co-partnership are not equally divided, the question of division is virtually that of differential wages.

I have here put the point hypothetically in the simplest form for the sake of clearness, and do not mean to suggest that three men could not work together with unequal ability for equal shares in the results ; in such a small party other motives may be strong. But among a large number self-assertion invariably arises and demands the differential treatment of varying capacity. The failure of so many attempts at co-operation on a basis of equality is largely due to that cause.

Profit-sharing, therefore, does not dispose of the questions that arise in connection with wages, and the same criticism applies to the plan which has been advocated by M. Yves Guyot,[1] and is called by him the commercialisation

[1] *Les Conflits du Travail et Leur Solution.*

of labour. It consists in the manufacturer contracting with a trade union or unions for a certain quantity of production at an agreed price. He provides premises, plant, raw material and skilled supervision, the union provides and pays the labour, with which the manufacturer has no direct relations at all. The idea is ingenious and attractive and deserving of more attention than it has received. In essence it is a return to the ante-factory relations; it abolishes the ordinary causes of friction between labour and capital and hands them over to the trade union, including the method of remuneration, which otherwise remains untouched. The problem of getting the best work of which they are capable out of the men would then rest with the union. The weak point about it is that it lacks the distinctive advantage which attaches to profit-sharing. This lies in giving to the wage-earners a direct interest in the success of the undertaking as a whole, which is quite a different thing from the differential incentive of the individual. The latter elicits the best efforts of each man by paying him accordingly, but it offers no incentive to him to promote the interests of the whole by care of machinery, for instance, or by economy of power or raw material. It may even lead him to be particularly extravagant or careless of these things in the effort to increase his own output. A striking illustration of this tendency occurred on the Prussian State railways. Premiums were paid to men for economy in coal—premiums for economy are, of course, a variation of premiums for speed or output—and it was found that some of them were in the habit of stealing coal at night from the railway depots in order to earn the premiums; in other cases they failed to keep scheduled time from the same motive. Now a direct interest in the concern as a whole obviates this tendency. It has the further

advantage of reducing the need, and the expense, of supervision.

I submit, therefore, that a thoroughly effective method of remuneration includes both principles—(1) the differential incentive, which acts on the individual as such; (2) profit-sharing which acts on him in his collective capacity as a member of a body bound together by common interests and working for a common end. By increasing the efficiency of labour they diminish its cost and so increase profits, although wages rise. I admit that the practical application of these principles—and particularly that of profit-sharing—presents difficulties; but they are not insuperable, if the problem be approached with understanding and goodwill. The mode and degree of application must vary with the circumstances which demand the most elastic treatment. The attempt to lay down a common formula for the precise share of profits that ought to come to "labour" in all industrial enterprises may be an interesting exercise of the mind, but it bears no relation to the actual conditions of life.

It remains to consider the comparative application of the principles discussed in the three countries. Upon this point information is too defective to permit of a dogmatic utterance. The principle of the intensive differential rate is supposed to be an American invention; but I have shown that it is not so. It was in operation in Lancashire (like most other industrial devices) before it was taken up in America. Nevertheless there is, I believe, more readiness to recognise and apply it in America than in England. It is not true that price-lists for piece-work are never cut by American employers; I have met with cases myself and have read of others;[1] but it certainly appears to be less

[1] See *The Social Unrest*, by Graham Brooks, p. 183.

common than in England. The principle of getting the best out of every man on the one hand and of giving every man the fullest opportunity to make the best of himself on the other is more in consonance with the American than with the English spirit. There is more alacrity to apply it on the part of employers and less opposition on the part of the men or of the trade unions. A leading English trade unionist has said on this point: "It is inconceivable that workmen would refuse to increase their earnings if they had a chance of doing so;"[1] and so any one might suppose. But they sometimes do, notwithstanding. The premium plan of payment has met with isolated opposition in America, but it is in England that a great federation of trade unions has pronounced a solemn condemnation of it. In 1904 a committee was appointed by the Engineering and Shipbuilding Trades' Federation to report on the system which had been introduced into the royal dockyards and into some private works. The report was an unqualified and unanimous condemnation on the ground, among other objections, that the "system was an adaptation of the most pernicious and degrading condition of employment in modern industrial history, the task system, and created jealousy and ill-feeling". Fortunately for British industries the view of the committee was not entertained by the Amalgamated Society of Engineers, which had previously agreed to the system, and the report does not appear to have had much practical effect in preventing its adoption, though the English and Scottish Ironfounders' Societies have made a compact to oppose it. In short, it is making its way, though less rapidly, so far as I can gather, in England than in America. That the differential principle will continue to spread in one form or another there can be

[1] G. N. Barnes, *The Engineering Magazine*, January, 1901, p. 564.

no manner of doubt. The contention that it is degrading for a man to use his powers to the best advantage and get fairly paid for it is too contrary to reason to prevail long with any men but shirkers or dreamers. And if reason fails economic pressure will enforce the principle both on employers and employed, just as it is steadily shaping the course of labour conditions in the direction of shorter hours and higher pay. It is economic pressure at the back of organised labour which has forced employers out of the blind way of keeping men at work as long and paying them as little as possible; and the same pressure at the back of employers is forcing men out of the equally blind way of doing as little and trying to get as much as possible. Industrial victory will rest with those who most fully and speedily recognise the situation.

With regard to Germany I have not enough information to make a decided comparison, even in general terms; but events are certainly moving in the same direction there. The two movements of shortening hours and raising wages have long been in progress. Some evidence on both has been collected by Professor Ashley,[1] and some more by the United States Labour Bureau.[2] I have other material that might be added, but will content myself with an interesting case, which well illustrates the movement. In a Prussian mill which competes successfully with Bradford and Lawrence, and sells its goods in the English and American markets, the weekly hours in 1895 were $64\frac{3}{4}$, and the average earnings of male workers were 21·42 shillings a week; in 1899 with the same hours the earnings had risen to 23·58 shillings; in 1903 the hours were reduced to 60

[1] *The Progress of the German Working Classes*, by W. J. Ashley.

[2] *Bulletin of the Bureau of Labour*, No. 54. September, 1904. See also *Die Deutschen Städte*, by Dr. Wuttke.

without any diminution of earnings; in 1904 the mill was working short time, namely 54 hours, yet the earnings were then precisely the same as they had been with $64\frac{3}{4}$ hours in 1895.

The movement, so clearly shown by this case, is general; but so far as I can learn the intensive principle, though well understood, has not yet made much way. Perhaps it has not been necessary. The strength of the German people, as I have several times pointed out, lies rather in the maintenance of a uniformly good standard of capacity and performance than in eliciting exceptional talent. There is less need for suppressing the shirker and less scope for stimulating his opposite than in England and America. The sense of duty is stronger, the habit of faithfully performing a given task is more general, and individual aspiration much less marked. But with the diminution of hours, increase of wages and changes in the relation between capital and labour brought about by organisation and socialistic teaching, the old order will not permanently suffice to meet the increased competition effected by intensive methods of production elsewhere; the speed must be increased and the incentive adjusted accordingly. This is the price paid for shortened hours and higher wages, and there is no escape from it. When the Germans follow suit in this matter they may confidently be expected to do it more thoroughly and systematically than anyone else. They will take more pains to work out their time schedules and differential rates with precision, and will miss nothing that may conduce to the end in view. The theory of remuneration is already more discussed there than anywhere else.

Profit-sharing is a more difficult matter, and it appears to be making very little way in any country in spite of

some prominent examples which have been very frequently described, notably the South Metropolitan Gas Company in London, and Zeiss, the firm of optical instrument makers in Jena. According to reports made to a co-operative congress in 1902 there were then seventy-five cases in England, forty-two in Germany and twenty-three in the United States. The last did not include the case of the United States Steel Corporation, which is the largest scheme of the kind yet attempted; it was introduced in the winter of 1902-03. A large scheme has also been introduced in the cotton industry at Fall River since the strike of 1904.

Probably the list is defective, but when allowance has been made for that it is evident that the thing is as yet on too small a scale to exercise any perceptible influence. I venture to think, however, that it will increase and that England, which leads at present, is likely to prove the most favourable soil, because the organisation of employers and employed is much more advanced, their relations are better and the facilities for arriving at a mutual understanding, which is essential to any considerable extension of the system, are superior in England. I do not ignore the fact that up to the present time more failures than successes have been recorded and that much opposition exists on both sides; I attribute both failures and opposition to misunderstanding of the principle and misuse of the practice. If profit-sharing is regarded as an act of paternal, and therefore arbitrary, benevolence, or as a weapon against trade unions, or a means to any other ulterior end,[1] it is sure to fail and to excite distrust and hostility. The only sound basis is the economic one,

[1] The scheme of the United States Steel Corporation is said to have been partly a financial manœuvre, intended to improve the market value of the preference shares, which were bought and offered to the employees. It was probably also intended as a bulwark against the trade unions.

which I have endeavoured to explain. On that basis it becomes mutually advantageous, because it gives effect to the real relations of employers and employed, who are actually partners in production. The term "profit-sharing" is in itself a great stumbling-block ; if "product-sharing" were used half the difficulty would vanish. The subject is, however, too large to be treated properly here, and these speculations are taking me too far afield. Some further remarks on the relations of employers and employed will be found in the chapter on Trade Unions.

CHAPTER IX.

WORKMEN'S COMPENSATION AND INSURANCE.

The well-being of workers—it is a pity we have no other words than worker, workman, working-man, working-class or their equivalents in other languages to signify those who are engaged in manual occupations—the well-being of this class depends on many things besides their financial circumstances, and the latter depend on many things besides wages. It is impossible for me to discuss all of them, but some cannot be omitted, and one is the special provision made for this class against misfortune by accident, sickness or other cause of infirmity. The subject discloses a far greater discrepancy between the three countries than any point we have yet discussed, and a comparison which did not take account of it would be so defective as to give a false impression of the relative conditions of life prevailing in them. Germany here stands quite alone by reason of its unique system of State insurance, which is made up of compulsory thrift, State aid and employers' liability. No one can doubt that the general well-being of the working classes in Germany, which is strikingly visible to the eye and confirmed by vital statistics in spite of many unfavourable circumstances, is in a large measure due to the insurance system. Its operations extend far beyond the factory workers, with whose circumstances we are chiefly concerned, and far beyond their relations to the factory; but the several parts of the system are so bound together that

they must be taken as one whole. I shall therefore state the main facts about this great institution, but shall make no attempt to discuss it from the actuarial point of view, which presents great difficulties. One of the most accomplished of insurance statisticians, in charge of one of the largest insurance businesses in the world, and himself of German origin, confessed to me that he had tried to understand it but could not.

Excepting life insurance, which is a form of investment with a certain return, ordinary insurance is a sort of wagering on chances; the insurer bets that he will have a fire or an illness or an accident, or whatever it may be; the insurance office lays long odds that he will not; and since the office takes care to calculate the chances in its favour, they are against the insurer, who must expect to pay his share of the profits made by the insurance company. It differs from other betting in that its object is positive security against loss, not a problematical gain. The insurer buys peace of mind, but on the wager he must expect to lose. State insurance, however, stands on a different footing, and when some one else pays the premium the insurer clearly stands to gain. That is the case with the German workman; and in so far as he contributes himself the insurance is a form of compulsory thrift which has a good moral influence even if he never has occasion to draw the insurance money. Presumably those who do pay the premium are buying the efficiency and contentment of labour. Whether they get their money's worth or not is another question, to which I shall return after giving an outline of the main provisions of the system.

There are three branches of compulsory workmen's insurance—(1) sickness; (2) accident; (3) infirmity or invalidity. The first is directed against temporary in-

capacity through illness, the third against permanent incapacity through old age or chronic infirmity, while the second comes between them and partakes of the nature of both. It provides prolonged maintenance and means of restoration in temporary disablement through accident, permanent maintenance in permanent disablement from the same cause, and assistance to widows and orphans in case of death. In the last point it goes beyond the age and infirmity allowance which ends with the life of the insured; on the other hand it only covers accidents sustained in the course of occupation, whereas the old age and infirmity provision covers all cases.

Sick Insurance.—General compulsory insurance of workmen against sickness dates from 1883. Previously such insurance had been to some extent regulated by law, and provincial governments possessed the power of making it compulsory; but for the most part it remained voluntary, and was effected through registered societies. The law of 1883 made it compulsory on all persons in a dependent position working regularly for wages in manufactures, commerce, and trades; and further gave local authorities the power to make it compulsory on other classes not coming under this description, such as persons temporarily engaged, apprentices, domestics, and agricultural labourers. The law has subsequently been amended and extended. The insurance is effected through a number of different channels, some public, others private. The idea is to encourage the internal administration of the business by those who have a common interest either of locality, occupation, or class. Consequently different branches of industry—mines, manufactures, building trades, and hand trades—have their own series of insurance funds, which may be single or associated in larger or smaller groups;

and there are also the old registered societies. All these form specialised branches of insurance. Then, to cover the remaining industrial population, there are general public insurance funds established for the separate localities, grouped in districts (*Ortsversicherung*); and if these are inadequate the local corporation itself becomes the insurance office (*Gemeinde-versicherung*). Each individual need only be insured in one office. The aggregate number of authorised sick insurance funds in the Empire is over 23,000, and of persons insured in them between nine and ten millions. The rate of contributions depends on the rate of earnings. It varies from 2 to 3 per cent. of the average earnings of each class of workmen; but in the case of the *Gemeinde-versicherung* it is from 1½ to 2 per cent. of the wage customarily paid in that locality to the ordinary day labourer. Two-thirds of the amount is payable by the person insured and one-third by the employer. The benefit is payable for not more than thirteen weeks; it includes medical treatment, drugs, etc., free, and sick pay beginning from the third day of incapacity, or free treatment in a hospital with half-pay for the sick person's family. Mothers are entitled to the same for four weeks after confinement. The legal *minimum* of sick-pay is one-half the previous earnings.

The following table gives the chief statistical details for the six years ending 1901 :—

Year.	Persons Insured.	Cases of Illness.	Days of Illness.
1896 . . .	7,944,820	2,763,757	47,608,226
1897 . . .	8,337,119	2,964,937	51,513,783
1898 . . .	8,770,057	3,002,593	53,201,173
1899 . . .	9,155,582	3,476,067	60,406,683
1900 . . .	9,520,763	3,679,285	64,916,827
1901 . . .	9,641,742	3,617,022	66,652,488

Year.	Revenue.	Contributions.	Payments.
1896 . . .	£7,790,491	£6,332,810	£6,112,689
1897 . . .	8,390,503	6,774,335	6,699,989
1898 . . .	9,025,130	7,262,030	7,144,571
1899 . . .	9,734,104	7,735,570	8,084,980
1900 . . .	10,480,976	8,302,299	8,825,377
1901 . . .	9,184,431[1]	8,567,663	8,902,959[1]

Accident Insurance.—The State system of insurance against accident belongs to the same period of social legislation as the sick insurance. Both were due to the action of Kaiser Wilhelm I., who took a profound interest in the subject, and persisted, no doubt under the advice of his Chancellor, in urging legislation upon the Reichstag in a series of Royal messages, until the difficulties were overcome and the project passed into law. This was accomplished in regard to accidents in 1884, after some previous unsuccessful attempts. The law then passed was extended in 1885, 1886, and 1887, and further amended in 1900. Previously compensation for injuries had been regulated by the Liability Act of 1871, under which railway servants were entitled to such compensation unless the employer could prove unavoidable causes (*höhere Gewalt*) or the fault of the injured, and persons employed in mines, quarries, and factories were entitled to it if they could prove negligence on the part of the employer or his representatives. The amount of compensation lay within the discretion of the Court. That was all changed by the new legislation. The burden of proving liability only rests now on the injured in cases of intentional injury or for amounts exceeding the regular insurance payment. There are four classes of occupations (1) industry; (2) agriculture; (3) building; (4) marine. These are all covered by one

[1] Method of reckoning changed.

general law but each has its own variations; and there are special provisions for (5) prisoners and (6) Government officials. "Industry" includes all workmen and officials with a salary not exceeding £150 a year who are employed in mines, quarries, wharves, docks, factories, breweries, smelting works, wells, post and telegraph offices, railways, military and naval establishments; also brick-layers and masons, smiths, chimney sweeps, window cleaners, butchers, carmen, porters, cellarmen, and warehousemen. The other insurance classes do not concern us. Insurance is effected through trade associations of employers formed in specified districts, larger or smaller. These corporations have a legal personality and considerable powers of self-government; every employer affected by the law is a member of the local association embracing his trade. Disputes fall within the jurisdiction of local arbitration courts, and the whole system is under the supervision of an imperial office which is composed of permanent and temporary members; the former, together with the president, are appointed for life by the Crown on the nomination of the Federal Council; the latter number eighteen, of whom six are chosen by the Federal Council, six are delegates of employers, and six delegates of workmen. The insurance funds are formed by contributions from the members of the trade associations in proportion to the salaries and wages paid in their business.

There is no claim for compensation when an accident is intentionally caused by the injured person; and the claim may be wholly or partly refused when the injured person has contributed to an accident by a criminal act or by intentional wrongdoing. Otherwise compensation is payable as follows:—

(*a*) In case of injury: (1) free medical treatment, drugs

and any appliances medically required, such as crutches; (2) an allowance so long as the injured is unfit to work; in case of complete incapacity the allowance is 66⅔ per cent. (that is, two-thirds) of the previous annual earnings and is called "full allowance"; in case of partial incapacity it is in proportion to the impairment of wage-earning capacity sustained and is called "part allowance"; (3) when the injured is rendered not only incapable of work but totally helpless, the allowance is increased up to the full amount of the earnings; (4) if the injured was already at the time of the accident permanently incapable, compensation is confined to medical treatment; but if such a person is thereby rendered totally helpless an allowance up to half the "full allowance" is payable; (5) so long as the injured remains out of work in consequence of the accident and through no fault, the part allowance may be raised to full allowance by the association. Allowances begin after the lapse of thirteen weeks from the time of the accident. During that period the case comes under the sick insurance, which consequently deals with all minor injuries; but from the beginning of the fifth week it is provided that the sick pay shall be at least 66⅔ per cent. of the previous earnings, and if the sick fund to which the person belongs pays less than this, the employer in whose business the accident took place has to make good the difference. If the injured belongs to no sick fund the employer has to take its place during the first thirteen weeks; or the association to which he belongs may fulfil this duty.

(*b*) In case of death the compensation is: (1) burial money of not less than 50s., otherwise one-fifteenth of the annual earnings; (2) an allowance to the family, which varies, according to circumstances, from 20 to 60 per cent. of the annual earnings. A widow is allowed 20 per cent.

till her death or re-marriage, and each child 20 per cent. until the age of sixteen ; other dependent relatives may also get 20 per cent. if in want ; but the total allowances are not to exceed 60 per cent.

Some observations will be in place here. It will be noted that the burden of compensation for accidents is shared between the sick insurance, to which the workpeople contribute, and the accident insurance, to which they do not ; and since all cases of injury come under the former, whereas many never reach the fourteenth week, when the accident insurance steps in, it may be, and has been argued, that too great a share of the compensation falls upon the workpeople themselves. The Social Democrats have urged that the burden should be differently divided, the employers paying the whole of the accident compensation and the employed the sick insurance. It appears, however, from the records of the ten years 1886-95 that, though the sick insurance deals with many more accidents than does the accident insurance, the burden of compensation falls far more heavily upon the latter, because the cases for which it has to provide are the severe ones. Thus seven-eighths of the whole cost of accidents was borne by the employers' associations. The employers also provide one-third of the sick funds ; so that altogether they defray 92 per cent. of the accident charges. Further, it is found that of the payments made out of the sick funds, only $6\frac{2}{3}$ per cent. go for accidents, and $93\frac{1}{3}$ per cent. for sickness. Consequently the advantage accruing to the workpeople from the employers' one-third contribution to the sick fund is much greater than the disadvantage to them of having to pay a very small share of the accident money. Calculated out for the year 1897 the difference in their favour amounted to $35\frac{1}{2}$ million marks ; they actually contributed $112\frac{1}{4}$

millions, whereas under the Social Democratic scheme they would have paid 147¾ millions. Another advantage accruing to them under the existing system is a certain degree of participation in the management of the employers' association. This takes effect in a matter of great importance to industrial welfare and efficiency, to which I have already referred when dealing with factory conditions. One of the duties of the trade insurance associations is to draw up rules for the prevention of accidents in factories; and in formulating such rules representatives of the workmen have an equal voice with the employers. I have quoted from one of these sets of rules and pointed out their influence in securing good order and clear gangways in the shops.

Another point to be noted is that this State system obviates the difficulty of the possible bankruptcy of an employer, which is one of the weak points in the English law affecting compensation for injury.

Statistics of Accident Insurance in Industrial Occupations.

Year.	Insured.	Total Injured.	Killed.
1900 . . .	6,928,894	51,697	5,108
1901 . . .	6,884,076	55,525	4,979

Year.	Permanently Incapacitated.	Total in Receipt of Compensation.	Total Compensation Paid.
1900 . . .	592	310,105	£2,929,360
1901 . . .	595	319,576	3,365,430

Year.	Injured.		Killed.	
	Persons.	Per 1,000 Insured.	Persons.	Per 1,000 Insured.
1886 . . .	9,723	2·80	2,422	0·70
1887 . . .	15,970	4·14	2,956	0·77
1888 . . .	18,809	4·35	2,943	0·68
1889 . . .	22,340	4·71	3,382	0·71
1890 . . .	26,403	5·36	3,597	0·73
1891 . . .	28,289	5·55	3,634	0·71
1892 . . .	28,619	5·64	3,282	0·65
1893 . . .	31,171	6·03	3,589	0·69
1894 . . .	32,797	6·25	3,438	0·65
1895 . . .	33,728	6·24	3,644	0·67
1896 . . .	38,538	6·72	4,040	0·71
1897 . . .	41,746	6·91	4,252	0·70
1898 . . .	44,881	7·10	4,613	0·73
1899 . . .	49,175	7·39	4,772	0·72
1900 . . .	51,697	7·46	5,108	0·74
1901 . . .	55,525	8·07	4,979	0·72

Year.	Incapacitated.					
	Permanently.				Temporarily.	
	Wholly.	Per 1,000 Insured.	Partly.	Per 1,000 Insured.	Persons.	Per 1,000 Insured.
1886 . . .	1,548	0·44	3,780	1·09	1,973	0·57
1887 . . .	2,827	0·73	8,126	2·11	2,061	0·53
1888 . . .	1,886	0·43	10,270	2·38	3,710	0·86
1889 . . .	2,331	0·49	12,788	2·70	3,839	0·81
1890 . . .	1,869	0·38	16,109	3·27	4,828	0·98
1891 . . .	1,570	0·32	17,481	3·42	5,604	1·10
1892 . . .	1,507	0·30	18,049	3·55	5,781	1·14
1893 . . .	1,377	0·27	19,740	3·82	6,465	1·25
1894 . . .	855	0·16	20,025	3·82	8,479	1·62
1895 . . .	780	0·15	19,312	3·57	9,992	1·85
1896 . . .	595	0·10	20,251	3·53	13,652	2·38
1897 . . .	625	0·10	21,247	3·52	15,622	2·59
1898 . . .	538	0·08	22,348	3·54	17,382	2·75
1899 . . .	581	0·09	23,837	3·58	19,985	3·00
1900 . . .	592	0·08	24,790	3·58	21,207	3·06
1901 . . .	595	0·09	26,158	3·80	23,793	3·46

These figures do not include the agricultural and State sections of the accident insurance system. Ths total number of persons insured in 1901 was 18,866,712 : the number

in receipt of compensation was 476,260; the compensation paid was £4,927,790.

It appears from these tables that the percentage of accidents entailing compensation has steadily increased since 1886, both absolutely and relatively to the number of persons employed; but by far the greatest part of this increase occurs in the class of minor injuries involving only temporary incapacity. Fatal cases have increased since 1894, and the annual average is higher than it was in the earlier years of insurance. On the other hand, there has been a marked diminution in the number of persons permanently and wholly incapacitated. The diminution is so great that it suggests some change of policy or classification, since it is not accompanied by a diminution of fatal accidents. On the whole the figures suggest that insurance tends to increase accidents or claims. The occupational groups in which accidents were most numerous in 1901 were: Carriers and carmen, 14·5 per 1,000; timber trade, 12·9; quarries, 12·4; mines, 12·2; building trades, 11; flour mills, breweries and sugar refineries, 11; iron and steel, 10·1. In the textile industries the proportion was 3·5; in leather and clothing, 3·6; and in paper-making and printing, 4·6.

Infirmity Insurance.—The infirmity law is the latest of the insurance provisions made for workpeople by the State, and it is the most comprehensive. It applies compulsorily to all persons over sixteen years of age who work for wages or for salaries up to £100 a year, with the exception of those Government and other public officials who are otherwise provided for. Persons in receipt of more than £100 but not more than £150 have the right of voluntary insurance. This law is a continuation of the previous legislation initiated under Kaiser Wilhelm I., who left the completion

of the scheme to his successors. Its preparation was encouraged by Friedrich III. during his brief reign, and was taken in hand energetically by the present Kaiser immediately on his accession. It was passed in its original form in 1889, but underwent considerable revision in 1899, when a new Act was passed which even found favour with the Social Democrats. Its object is to secure an allowance for infirmity or for old age. The condition for the first is incapacity to earn a living lasting at least twenty-six weeks, and for the second the completion of seventy years, whether accompanied by any infirmity or not. In addition it is required that in order to be entitled to either allowance the claimant shall have been insured for a fixed period, which is called the time of waiting; for an infirmity allowance it is 200 weeks if 100 have already been paid, and 500 if they have not; for an old-age allowance it is 1,200 weeks. As part of such waiting time are reckoned the term of military service and any period of inability to pursue a trade through illness. The allowances are reckoned in five classes, according to the annual income of the pensioner: (1) Up to £17 10s., (2) £27 10s., (3) £42 10s., (4) £57 10s., and (5) over £57 10s. The old-age pension for each class is: (1) £5 10s., (2) £7, (3) £8 10s., (4) £10, and (5) £11 10s. The infirmity allowance is reckoned from the following basis for each class: (1) £5 10s., (2) £6, (3) £6 10s., (4) £7, and (5) £7 10s., to which an addition is made in proportion to the length of time during which insurance has been maintained, namely, 3pf., 6pf., 8pf., 10pf., and 12pf. respectively for every week. The allowances are paid monthly in advance through the post.

In addition to these main provisions payments are made under certain conditions on the occasions of marriage, disabling accident and death.

The insurance fund is provided by regular payments, divided equally between employers and employed, which at present stand at 14pf., 20pf., 24pf., 30pf. and 36pf. (roughly, from 1½d. to 4½d.) a week for the respective classes. The State adds 50s. for each allowance paid. The contributions are paid in by means of stamps, which are on sale at post-offices, and are affixed to cards carried by the insured persons. The stamps are provided by the employer, who deducts half the value from the wages; they are affixed at the time of paying wages and are good for one, two or thirteen weeks, according as wages are paid weekly, fortnightly or quarterly. The insurance is administered by special offices or institutes, established for large districts or for whole States. Each has a president, who possesses the standing of a Government official, and a committee composed of an equal number of representatives of employers and employed (not less than five of each). Each insurance office has attached to it at least one arbitration Court, with an independent chairman, nominated by the Government, and assessors equally representing employers and employed. General supervision is exercised by the Imperial Insurance Office. For persons in the public service who come under the insurance law provision is made by means of special funds.

An important additional point is a provision for insured persons who are incapacitated by illness from earning their living. In such cases the insurance office is empowered to undertake the medical treatment of the sick person in a hospital or sanatorium; and if the person is subject to sick insurance, the obligations of the latter pass to the infirmity insurance, which is reimbursed from the sick fund in proportion to the claims of the sick person.

STATISTICS OF INFIRMITY INSURANCE.

NUMBER OF CLAIMS ALLOWED.

Period.	Infirmity.	Old Age.	Sickness.
1891-1901 (11 years) . .	734,251	389,971	14,309

Period.	Marriage.	Accident.	Death.
1895-1901 (6½ years) . .	742,910	589	164,236

AVERAGE AMOUNT OF ALLOWANCES.

Year.	Infirmity.	Old Age.	Year.	Infirmity.	Old Age.
	£ s.	£ s.		£ s.	£ s.
1892 . .	5 14	6 7	1897 . .	6 8	6 15
1893 . .	5 18	6 9	1898 . .	6 10	6 18
1894 . .	6 1	6 5	1899 . .	6 11	7 1
1895 . .	6 4	6 11	1900 . .	7 2	7 5
1896 . .	6 6	6 13	1901 . .	7 6	7 10

TOTAL PAYMENTS.

Year.	Infirmity.	Old Age.	Sickness.	Marriage.
	£	£	£	£
1900 . . .	2,678,650	1,311,210	32,570	246,950
1901 . . .	3,251,085	1,232,785	64,980	258,175

Year.	Accident.	Death.	Sanatoria.	Total.
	£	£	£	£
1900 . . .	550	83,335	278,915	4,636,465
1901 . . .	945	87,135	356,530	5,263,565

The foregoing bare outline of facts, without any complications, will give the reader unacquainted with the subject some idea of the character and scope of this gigantic system. Year by year its operations become larger, as the

following summary figures for 1902 will show. Under sick insurance nearly 4,000,000 cases received £9,300,000; for accidents 488,000 cases received £5,400,000; for infirmity about 800,000 persons received £6,020,000—total, 5,300,000 persons benefited to the extent of nearly £21,000,000. In 1891 the total amount paid was only £2,030,000. The benefit has therefore increased more than tenfold in eleven years. Of the total amount £2,000,000 was contributed by the State, £10,000,000 by employers, and £9,000,000 by the insured. That is to say, the workpeople received some £12,000,000, or £33,000 a day beyond the amount of their own contributions. That is really a very solid sum and a pretty heavy tax on employers.

I said above that presumably what they are buying is the efficiency and contentment of labour, and asked if they get their money's worth. As an observer, able to regard the situation in perspective and without prejudice, I am strongly of opinion that hitherto they have. Take contentment first. The working classes are not contented, of course; who is? But their discontent in the mass has taken the mildest form of expression—votes for social democratic candidates in the Reichstag elections. I cannot discuss the social democracy here, and will merely observe that its increasing success at the polls is not alarming, for as it succeeds it changes. Its power means something, no doubt; it means legislation in favour of labour, but it does not mean anything revolutionary. In spite of resolutions at congresses, the revolutionary programme is really as dead as the economic theory on which it is based. Like most other economic theories, it has been falsified by the course of events; and those who still believe in it—a dwindling band—are merely running their heads against the solid wall of facts, as such people will. The "Arbeiter

Frage" will find no sudden and violent "solution," but a gentle solvent; it will dissolve away, as all such questions do, and give place to another. That the growing strength of trade unions has taken this direction rather than that of interference in the shops is an advantage to employers worth more than can be estimated in money; and I have no doubt that it is in a considerable measure due to the easing of circumstances and the mitigation of misfortune secured by the insurance laws.

With regard to the efficiency of labour insurance has developed a very remarkable and unforeseen result. The prospect of having a great and increasing number of chronic invalids on their hands has stimulated the insurance offices and societies to a great preventive movement. It was found on investigation that consumption is the worst enemy; and about the same time the open-air cure was coming into vogue in Germany. The enlarged powers given by the Infirmity Insurance Act of 1899 in regard to the treatment of sick persons encouraged the experiment of sending consumptive patients to sanatoria, and the movement has grown with great rapidity. At first, most of the insurance offices sent patients to existing sanatoria and other cure establishments, but some began to build their own, and the demand increased so rapidly that the practice soon became general. According to the report of 1903 there were then between 70 and 80 sanatoria, containing 7,000 beds, for the accommodation of working-class patients under the Insurance Acts. Allowing three months' treatment for each case, they claim the ability to undertake 30,000 cases in a year. The following results are reported:—

Fully restored to work	67·3 per cent.
Fully capable of other work . . .	7·1 „
Partly ditto . . .	14·6 „
Not able to earn living	11·0 „

Or, put in another way:—

Cured or improved	87·7 per cent.
Unimproved	8·7 „
Worse	3·1 „
Died	0·5 „

There is at present great enthusiasm for a system which restores so many workers to a state of health, enabling them to earn their living; and the immediate gain to efficiency is obvious. How it will work out eventually remains to be seen. We do not yet know how long the improved health lasts, or how many contract tuberculosis again. If re-infection is common, the cost may easily become greater than the funds will bear. The system by which all the funds work in with one another more or less is so complicated, and the permissive powers under the Acts are so elastic, that the outcome cannot be fore-judged; it must be left to experience. The further and more obscure question of the ultimate effect of systematically preserving the susceptible and enabling them to propagate their susceptibility is too large to be discussed here and too academical. The preservation of the less fit is one of the general results of "civilisation"; but mankind can no more resist the power which draws in that direction than stop the ocean tides. Whither it leads we know not; but one thing is plain. The "ethical process" to which that impelling force is due cannot be opposed to the "cosmical process," as Huxley confusedly put it; they must be one; but what is the cosmical process?

There is nothing in England or America corresponding to the German State insurance, but in England the law makes special provision for compensation to certain classes of persons injured by accidents arising out of their occupation. The Workmen's Compensation Act, passed in 1897,

was admittedly inspired by the example of Germany; and it constituted an important departure. Previously, as still in the United States, compensation for injury from accidents could only be obtained under the common law of the land, modified by the Employers' Liability Act of 1880. The object of the latter was to facilitate claims to compensation by removing some of the disabilities existing under the common law. So far, therefore, it did recognise a special right of certain classes to compensation. But in practice it failed of its effect and no more need be said about it, except that proceedings may still be taken under it as an alternative, but not in addition to the Act of 1897. It was never much used and has now passed almost into abeyance.

The Workmen's Compensation Act makes employers directly liable to pay compensation on a scale laid down, "if in any employment to which the Act applies personal injury by accident arising out of and in the course of the employment is caused to a workman". The term "workman" includes every person engaged in the employment, "whether by way of manual labour or otherwise and whether his agreement is one of service or apprenticeship or otherwise". In this respect the English law appears to go further than the German, which does not apply to officials in receipt of more than £150 a year. The inclusion of all persons employed in the English Act, however, has not the importance that might be attached to it at first sight, for the maximum amount of compensation laid down practically limits the operation of the law to workmen and minor officials.

The employments to which the Act applies are railways, factories, mines, quarries, engineering works (construction or other work on railroads, harbours, docks, canals, sewers, etc.), work on buildings over thirty feet in height, and (by an extending Act in 1900) agriculture.

There is no liability for injuries which do not disable a workman for at least two weeks from earning full wages, and compensation can be refused for those caused by the workman's own misconduct. The first of these exemptions is the subject of great dissatisfaction on the part of workmen.

By the decision of the Courts in the case of Brintons *v.* Turvey in April, 1903, anthrax poisoning contracted in a factory is made an accident. The victim in the case was a woolsorter, and the disease was fatal. Compensation for disease caused by dangerous wool which a man is given to work upon seems only fair; but it may be very hard upon the employer too. The War Office insists on the use, for the manufacture of khaki cloth, of a particular self-coloured wool, which comes from anthrax-infected districts in Asia and is dangerous. A manufacturer may thus be forced to run some risk. Lead poisoning, on the other hand, has been decided not to be an accident. It is a chronic disease and the date of contraction cannot be fixed.

Employers may contract with their workmen to substitute for the provisions of the Act any other benefit or insurance scheme which is certified by the registrar of friendly societies to be not less favourable to the workmen than the Act. The use made of this provision is small and diminishing. During the five years ending 30th June, 1903, fifty-five schemes affecting 129,335 men had been certified, but at the end of the year, when most of the certificates expired, they fell to fifty. This is a pity; for such schemes, which are of a mutual character, provide more pecuniary benefit to injured men than the law allows,[1]

[1] According to the registrar of friendly societies the actual payments in thirty cases examined were 75 per cent. in excess of the maximum under the Act.

and possess other advantages. It is noteworthy that such schemes are opposed by some trade unionists on the ground "that the adoption of a scheme always creates a suspicion in the minds of a great many workmen that the firm must be using it for their own advantage".[1] Here we have an illustration of that baneful and invincible suspicion to which I have drawn attention.

Compensation payable under the Act is as follows:—

(*a*) In case of death:—

1. If the workman leaves dependants wholly dependent on his earnings the compensation is three years' wages with a minimum of £150 and a maximum of £300.
2. If he leaves dependants partly dependent the compensation is to be "reasonable and proportionate to the injury" sustained by them; the amount, which must not exceed that payable under (1) is to be agreed upon or failing agreement determined by arbitration.
3. If he leaves no dependants it is limited to defraying the cost of medical attendance and burial, up to £10.

(*b*) In case of total or partial incapacity for work, compensation is a weekly payment of not more than one-half the previous average weekly earnings, with a maximum of £1; payment continues during incapacity but only begins after the second week. After six months the weekly payment may be commuted to a lump sum, fixed by agreement or arbitration.

If these provisions are compared with the German ones they will be found less definite and less liberal. In the first place, the injured person receives nothing for the first

[1] *Report of Departmental Committee*, Cd. 2208, p. 104.

two weeks; in the second, the maximum allowance for disablement is only half the earnings, whereas the German maximum is full earnings and the regular allowance for complete incapacity to work is two-thirds; in the third place an employer can compound in case of permanent disablement instead of paying a pension for life; and, lastly, the lump sum provided in case of death may be less than the allowances under the German law, though in some cases it may also be more.

It is not possible to compare the pecuniary benefit received by the workmen because there are no returns for England.

The general working of the English Act, however, has been exhaustively examined by a departmental committee, and has been shown to be satisfactory on the whole though marred by a good many defects. The report of the committee[1] quite agrees, so far as factory workers are concerned, with the results of private inquiries made by myself among manufacturers and trade unions. The former invariably admitted that the compensation provided for by the Act was fair and just and not an excessive, though an appreciable, burden. In one large iron and steel works, I found that whereas the compensation previously paid under the Employers' Liability Act had only averaged about £75 a year, the annual amount now paid under the more recent Act was £3,700; and this may be taken as representative of works of the kind, in which accidents are frequent and severe. Employers complain rather of uncertainty with regard to their liability than of burden, and it appears that the liability tends constantly to increase. A large number of manufacturers insure against it either in Mutual Associa-

[1] Blue-book, Cd. 2208.

tions or in other insurance companies. I confess that I do not fully understand this proceeding. It may be wise for small employers who seldom have an accident at all but might be very heavily hit by a severe one; but in large works which have an ascertainable average of accidents year by year and can bear the cost of compensation without difficulty it seems more economical to settle their own claims and charge the amount to working expenses as a regular item. Insuring must be more costly because it involves contributing to the upkeep of the insurance association, if that is a mutual affair, and to its profits in addition if it is an ordinary trading concern. As a matter of fact, I found large works in which that view is taken. In one of these, where several thousand men are employed on very heavy work in which serious accidents are constantly liable to occur, the compensation worked out at 8s. per £100 of wages, whereas the rates charged by the Employers' Liability Assurance Corporation in works of the same character are 20s. and 25s. per £100. The whole question of insurance, however, is in an unsatisfactory state and too intricate to be discussed here. I refer the reader to the report of the Departmental Committee.

Trade union officials, for their part, likewise admitted that the Act was very beneficial, but they complained of it in some respects. The three chief points of complaint are: (1) that payment does not begin until after the lapse of a fortnight after the injury; (2) that workmen whose capacity is impaired by age or physical defects are liable to be discharged because they increase the risk of accident; (3) that compensation for permanent disablement to young persons is unfairly assessed on their past earnings, and should have reference to prospective earnings. The Committee dealt at length with all these points. With regard

to (1) they came to the conclusion that there were no sufficient reasons to justify them in recommending such a serious change as placing the burden of compensation for the first two weeks on employers. The chief reason against it is that it would encourage malingering. With regard to (2) and (3) the Committee recommended modifications of the law to meet the objections.

Other modifications have been recommended and the Act is in process of amendment, chiefly in the direction of clearer definition. It is outside the scope of my subject to enter into prospective details. The situation may be summed up by saying that the Workmen's Compensation Act has worked fairly well and proved a great boon to workmen without imposing an excessive burden on employers; but experience has revealed defects which it is proposed to modify. There is a clear tendency to proceed further in the direction of protecting workmen; it is not likely to take the form of the German State insurance, but it is very likely indeed to go on towards something like a substitute for that remarkable system. A noteworthy fact pointed out by the Committee is that the law works most smoothly and satisfactorily where the men are well organised.

In the United States the only protection afforded is practically that of the common law, as modified by special legislation in different States. The modifications are exceedingly various, but in general their intention is, like that of the English Employers' Liability Act of 1880, to remove some disabilities in the way of recovering damages for injury on the part of workmen. Thus in thirteen States the bar of "common employment" is abrogated in regard to certain industries and classes of injury. In twenty-eight States there is statutory liability for damages in cases of injury

caused by failure of employers to comply with provisions of law intended to secure the safety of employees. In some States such liability applies to all industries, in others only to selected ones. An important modification of the common law, which has been almost universally adopted, gives the right of action for damages by surviving dependants in case of death. Contracting out and compulsion to join relief organisations are prohibited in some States; in others such organisations are encouraged. In short, the legal conditions in minor particulars vary to an endless extent in different States; but they only affect the rights of workmen to proceed against employers for damages under the common law. No indemnity is laid down save in one case in a single State. In Maryland provision has been made for a system of State insurance to cover the liability of employers, and it is laid down that the indemnity for death under this system is £200.

On the whole the position of workmen in regard to compensation for injuries is not yet so advanced in the United States as it was in England before the Workmen's Compensation Act. With the position in Germany there is no comparison at all. The practice of some employers in voluntarily paying compensation or in supporting relief insurance schemes does not affect the comparison, for such practices were quite as frequent in Germany and in England before legislation brought all employers under a common rule. The only measure of the protection enjoyed by labour in the mass is the law. Voluntary institutions may be and often are more advantageous where they exist; but they affect such a very small proportion of the industrial population—a few pin points in a fifty-acre field—that they hardly count in a general comparison.

CHAPTER X.

BENEVOLENT INSTITUTIONS.

The concluding remarks at the end of the last chapter relating to private compensation funds apply generally to benevolent institutions maintained by employers for the benefit of their workpeople. Such institutions are very pleasant to contemplate; they attract much attention, being frequently described in newspapers and other periodical literature, and they do in fact make a great difference to the lives of those whom they affect. They appeal so strongly to sympathetic minds as to call up visions of universal peace and happiness in the industrial world. Some model settlement with its cottages, gardens, schools, play-grounds, hospital, stores, library, club, baths and other useful and pleasant things, is taken as a sample of what might be, and a Utopia is constructed from it. I have more than once in the previous chapters expressed the opinion that events are not moving in the direction of realising these aspirations. That does not arise from any hostility to them. On the contrary, I derive as much pleasure from contemplating model settlements as anyone else, and I believe there is a place for them; but I am convinced from a study of the facts that a general, or even a large extension of such things is a vain dream; and I am fortified in that opinion by the conclusions of two such experienced students of social questions as M. Yves Guyot[1] and Mr.

[1] *Les Conflits du Travail*, p. 5.

Graham Brooks,[1] who approach the subject from diametrically opposite points of view and agree in very little else. I shall not follow them in denouncing paternal institutions as a folly or a fraud, but the fact that such a champion of Individualism as M. Guyot and such a sympathiser with Socialism as Mr. Brooks should agree in denouncing them is strong evidence of wide-spread opposition. For my own part, I decline to subscribe to any "ism," for, sooner or later, it means prejudice and the attempt to make facts fit a theory. I neither admit any fundamental objection to paternal institutions nor expect to see their extinction. They do good work in their place and are better fitted for certain circumstances than any other "system". But, on the other hand, those who look for a "solution" of the "labour question," whatever that may mean, in this direction, deceive themselves. The whole tendency of the times is against it. The passing of industrial undertakings into the hands of corporations and companies, their great increase in size, the disappearance of personal relations, the growth of large urban communities, the organisation of labour, its growing power and independence, the recognition of the principle of equal representation in fixing industrial conditions, their regulation by law, universal education and the general democratisation of society—all these are fatal to the patriarchal order of things, to the idea of superior and inferior positions and to the conferring and receiving of "benefits". What labour demands in a modern community is not favours, but justice; not gifts, but a fair share of the takings, with the means and the opportunity to provide its own welfare institutions. In itself that is a sound, wholesome, and proper aspiration, inseparable, indeed, from the organic development of society.

[1] *The Social Unrest*, p. 203.

Nor is it one to which the benevolent can object, for benevolence includes justice and liberty. Those who "wish well" to others wish them at least these two. What the honestly benevolent employer really aims at is justice. In the older state of society it is attained in one way, in the newer in another. The conditions have changed; and if something is lost—the personal interest, the kindly family relations (where those existed)—something also is gained. Justice under the newer conditions will be far less dependent on individual good-will and far more generally diffused (for the personal interest, etc., have always been exceptional), and it will be free from any suggestion of condescension.

By benevolent institutions I do not mean conditions within the factory conducive to the well-being and efficiency of the workers. I have already discussed them in Chapter VI. The modern tendency is all in the direction of providing such conditions, more as a matter of good policy than of philanthropy. They are generally appreciated and never resented, though sometimes regarded with indifference or ridicule. The opposition is directed against benefits which may be supposed to serve instead of better wages and to be intended to reconcile workers with their position, and it comes from organised labour, as might be expected. The advent of trade unionism in an industrial community undoubtedly causes a change of attitude towards such institutions, and it sometimes breaks up or disturbs harmonious relations. It is useless to bewail such occurrences, and sweeping denunciations are as much out of place on the one side as on the other. Organised labour is no more justified in denying good intentions to benevolent employers than are the latter in seeing nothing but wanton mischief in organisation. Motives are mixed on both sides.

The employer's benevolence may be quite disinterested, and his intentions of the best, though sometimes they are not, and there is justification for the suspicion that showy appointments are intended to be a cover for low wages and cheap labour. On the other hand, the aspirations of labour to better its conditions and manage its own affairs are thoroughly justifiable ; but organisers of labour, especially if they are fed on socialistic theories, do sometimes lose sight of the real welfare of their clients in pursuit of a visionary aim and wantonly destroy that which they cannot replace. However the responsibility be apportioned the two things do not agree, and since the organisation of labour is advancing benevolence is receding before it. Employers who have spent much time, thought, and money on welfare institutions, find their labours not only unappreciated but positively made the ground for greater hostility than is displayed against their neighbours who have never spent a shilling or a minute's thought upon the welfare of the persons they employ. Naturally men treated in this way lose all interest in the work, and though some may continue it for a time from a sense of duty the general tendency is to let it lapse.

Now the organisation of labour has been carried much further in England than elsewhere, and we should expect to find less paternalism in consequence. That is, in fact, the case. I do not think it wholly due to trade unionism, for although England or Britain led the way in model settlements, as in most industrial matters, the sense of duty towards the employed has never been so generally developed here as in Germany. If it had been, trade unionism would not have been forced into existence so early or would not have displayed such unquenchable vitality and such vigorous growth. That is to say, the absence of benevo-

lence is cause as well as effect. The selfish greed of employers first drove labour to organise in self-defence, and the organisation thus stimulated has reacted on those employers who were not greedy. In Germany the same forces operate in the same way, but with different relative strength and consequently with different results. There has been more benevolence and less unionism, and consequently more benevolence remains, though it is declining as the other increases, imbued as it largely is with the bitter spirit of social democracy, which demands the total abolition of capital and hates the just employer more than the unjust, just as the extreme temperance reformer hates the moderate drinker far more than the drunkard, because the latter serves for a lever to the "cause" (not of temperance but of prohibition), while the former is an obstacle. The more general good-will of employers towards their employed in Germany has certainly retarded the development of trade unionism. I find welfare institutions much more common there than in England or America. They take many forms and I do not intend to attempt a comprehensive account of them, as their importance is diminishing. But I will give a sample, and I select for the purpose a very favourable specimen. It is too favourable to be regarded as an ordinary type, but at the same time it illustrates with great clearness the characteristic features of German welfare institutions in the industrial world.

The firm of D. Peters & Co., of Elberfeld, manufacturers of alpaca, worsted and silk goods, on becoming a limited liability company in 1896, determined to place its various benevolent institutions on a permanent footing by forming a special company for their administration, entitled "Welfare Fund of D. Peters & Co. in Elberfeld and Neviges (Limited)," with a nominal capital of £1,000 in order to

comply with the law. The concern is carried on by the co-operation of the firm, the general assembly of workers and officials and the council of elders. The general assembly meets annually in April, but extraordinary meetings may be called by the Welfare Fund or at the request of sixty male adult workmen. The business of the general assembly is to receive the annual report, elect the council of elders and to vote on resolutions, which may be proposed by the firm, the council of elders, or fifteen delegates. The council of elders is an interesting institution, not uncommon in Germany, but unknown, I believe, in England and America. It consists of one member of the firm, who acts as chairman, but has no vote, and eight ordinary members, half of whom are elected by the general assembly and half named by the firm. Only men over thirty years of age who have been ten years in the employment of the firm are eligible. The functions of the council are to examine the accounts, look after cases of need and misfortune, supervise the conduct of the younger workpeople, encourage them to self-improvement in their leisure time, combat rough behaviour and drunkenness, assist in securing the observance of the factory rules and in preventing waste. Further, as representatives of employer and employed, they have in consultation with the firm to settle the factory rules, the piece-work price-list, the hours of work, the means for preventing danger and increasing efficiency.

The object of the " Welfare Fund " is to administer the various institutions founded by the firm for the benefit of the workpeople. These are eleven in number :—

1. *Sick Fund.*—Originally founded by the firm in 1861, but since 1885 regulated by the general law of sick insurance. The object is to provide immediate relief in cases of sickness and death. The employers contribute one-third,

the work-people two-thirds; the rate of contribution is 3½ per cent. of wages earned. The benefits are: Sick-pay for twenty-six weeks to the extent of half the average wage; medical attendance, drugs, spectacles, bandages, etc., and hospital free to members, medical attendance and hospital free to their families, drugs, etc., half-price; 30s. for confinements; £4 10s. on the death of a member, £2 5s. on the death of a member's wife. These benefits go beyond the requirements of the law. Such sick funds are universal, but not necessarily administered in the same way.

2. *Compulsory Savings Bank.* — All the workpeople must belong. Married men contribute 5 per cent., and unmarried 10 per cent. of their wages, but the council of elders may reduce the latter to 5 per cent. Payments are made every pay day, except in the week before Easter and Whitsuntide, and the week before and after Christmas. Money can only be withdrawn with the consent of the council of elders, unless it is required for the purchase of a house or furnishing on marriage. Interest at 6 per cent. is paid on deposits up to £100; after that the depositor is free to dispose of his savings as he pleases. Persons leaving the employment receive their savings in full.

3. *Voluntary Savings Bank.* — This is for persons who wish to continue saving beyond £100, or to put by money for a short time. Interest at 5 per cent. is paid on deposits by workpeople, officials, pensioners and widows up to £300, and by girls who have left work up to £200. On further deposits interest is paid at 4 per cent. For current deposits at short notice 3 per cent. is paid. In the year 1900 the number of depositors was 771, and their savings amounted to £24,595. Of this sum £15,152 was held by 490 depositors in the compulsory bank, and £9,443 by 281 depositors in the voluntary bank.

4. *Assistance Fund.*—For cases of sickness and need which do not fall within the legal competence of the sick fund. It is administered by the council of elders, and is formed out of the factory fines, interest on the original capital of the Welfare Fund, the takings of the bathing establishment, and voluntary contributions by the firm.

5. *Pension Fund.*—Founded in 1868 to make provision for persons in the employ of the firm who had become unable to earn their living, and maintained entirely by the firm. When the general Infirmity Insurance Act was passed in 1889, the firm determined to continue their own fund in addition. The Act requires employers and employed to contribute to the State insurance in equal parts; but the private pension fund had previously cost the firm twice as much as their statutory contribution under the Act. They resolved, therefore, to continue contributing to the private fund the same amount as to the State insurance, until the former reached £5,000, and from the interest thereof to supplement the State allowance to pensioners. In the spring of 1902 there were twenty-three pensioners, drawing £441 from the fund in addition to £204 from the State insurance. Fifteen out of the twenty-three had been in the service of the firm for an average of thirty-one years.

6. *House-purchase Fund.*—This is a special and noteworthy scheme. Its object is to help workmen to buy their own houses by instalments. The attempt was first made by giving the men a present of a month's pay; but this failed. In 1878 the plan was tried of building houses and assisting workmen to purchase by bonuses, so that in the course of seventeen years a man might become the freehold owner of his house without paying any more than he would have done for renting an inferior house. A single payment of 8 per cent. of the cost price was required, followed

by annual instalments of 8 per cent.; and a bonus was added to each payment ranging from 15 to 25 per cent. according to the workman's length of service. Down to the end of 1900, thirty-six family houses had been bought by workmen and fifteen partly bought—in all fifty-one, representing a cost of £8,400. They are capital houses with gardens and close to the mill. A somewhat different system has been adopted for a number of more expensive houses built since 1900.

7. *Widows and Orphans Fund.*—Maintained by the firm and intended to fill a gap in cases where the death of the breadwinner deprives the family of the benefits of the assistance and pension funds.

8. *The "Welfare" Institute.*—This is a large building standing in its own ground, devoted to the use and enjoyment of the workpeople. It was opened in 1883 to celebrate the fiftieth anniversary of the firm's foundation. It contains a large hall for festive gatherings, weddings, concerts, and so on; a smaller hall used for the weekly practices of the choral society; a large room used as a kindergarten for the workpeople's children and on two evenings a week for a well-attended hand-work school; a similar room used as a carpenters' shop for boys of school age; a large kitchen used as a cooking school. Two courses of twenty-four weeks and two evenings a week are held in the year, and each class consists of eight girls.

9. *Bathing Establishment.*—Is next door to the mill. Shower baths are free; other baths cost 2½d. The proceeds go to the assistance fund. The baths are open to outsiders on payment.

10. *Steam Laundry.*—A complete and modern installation which does all the washing for the workpeople at an inclusive charge of 5s. a quarter for each household, large

or small. This results in a dead loss, so washing is taken in from the public at ordinary rates to make good the deficit.

11. *Library.*—Founded in 1894, with 1,000 volumes of general and educational literature.

The aggregate sum standing in the various benefit funds at the end of 1900 was £41,110, and the total payments made out of them up to that date amounted to £110,648. The number of persons employed in the mill is about 500.

The man who has anything to urge against this institution must be very hard to please. It is a genuine instance of conscientious and sympathetic treatment of the employed by their employers, for the firm does not employ cheap labour or pay low wages. On the contrary, a much larger proportion of men to women is employed than in a corresponding Bradford mill and the wages paid are higher; they are higher also than in neighbouring mills having no such benefits. Further, the hours of work have been gradually reduced in recent years by the voluntary action of the firm without any reduction of wages.

The whole thing is typical of the best German qualities; it is thorough, well thought out, solid and sensible with a flavour of patriarchal virtue. It is paternal, no doubt, but paternal in the best sense. There are no fancy appointments, devised with an eye to the camera, no theoretical fads and no parade of benevolence. The management is mainly in the hands of the men themselves and their elected representatives, who also settle with the firm all the conditions of work by mutual agreement. Here is collective bargaining, freedom of contract, all that a trade union secures and a great deal more. I do not wonder that kind souls, who are distressed by industrial strife, on seeing a case like this desire to see such conditions extended. There is no reason why they should not be in suitable circumstances; but an

essential point is a certain degree of remoteness. Neviges is an outlying village, several miles from Elberfeld. It does not consist only of Messrs. Peters' mill; there are others, but not many, and the place is small. To be successful, and even to have a fair chance of surviving, an industrial settlement conducted on paternal or philanthropic lines must lie apart. That was the case with Saltaire when it stood for a model; since it became part of Bradford the philanthropic side of it, except that which consisted of permanent gifts, has lapsed or passed into the hands of the local authority. Such model settlements as there are still in England lie apart. Among them Cadbury's cocoa works at Bourneville and Lever's soap works at Port Sunlight have been made as familiar as the features and career of a popular actress by repeated description and illustration But they produce articles of a fancy character, depending mainly on advertisement, and possessing no international industrial significance. The great manufacturing industries cannot be successfully planted anywhere at will; they flow to certain localities where the conditions are favourable and they tend to get massed together in large communities, where paternal institutions can hardly live. When the circumstances are most favourable, namely, in some settlement apart and self-contained, a certain amount of philanthropic effort is simply necessary for the conduct of the business. The persons employed must live, and housing and other accessories must be provided for them. That is the first step. Then schools follow, churches, clubs, libraries, stores and so on. I have mentioned some prominent instances in my descriptive chapters. Krupp's, the largest and most famous, began in this way from the sheer necessity of housing the workmen as they increased with the rapid growth of business. Saltaire is another famous instance,

and both of these are particularly instructive because they illustrate the adverse tendency of the times to such institutions. As Saltaire has become part of Bradford, so Essen has grown into a big town, which refused to return the late owner to the Reichstag and is falling more and more under the sway of social democracy. The institutions go on, but they are the object of bitter attacks and the life has gone out of them. A third case described is that of the cotton town of Pelzer in South Carolina, and it illustrates the opposite conditions proper to success. The little town stands alone in the heart of the country; every foot is owned by the manufacturing company which has made it, and runs it as a town. Houses, schools, churches, hotel, library, institute, water supply, bicycle track, gardens, cow pastures —all are provided and owned by the company. It has also a savings bank, but does not run the stores. The mill hands have one of their own, which is managed by themselves.

Pelzer is a good example of the judiciously paternal in the American style. It is on a much larger scale than the Peters establishment at Neviges, and the natural conditions are different; but the comparison illustrates some characteristic points of distinction between German and American methods. The elaborate economic provisions of the former, designed to promote thrift and safeguard the welfare of those concerned in all contingencies, are absent from the latter, which leave the people very much to themselves in regard to such matters while yet retaining far more absolute power over them.

There are several other settlements somewhat similar to Pelzer in the United States; and some of them are of a much more ornate character. Among them Hopedale and Ludlow in Massachusetts are probably the best known.

The former is the seat of the Draper textile machinery works, one of the most famous concerns of its kind in America. The company has built a number of houses, a church, library, school and town hall, but it does not own the village. Similarly at Ludlow, a mill village where hemp and jute are manufactured, the owners have built most of the houses, a church, school, library and so on, and have established a savings bank and other institutions for recreation and self-improvement. The observations of Mr. Hubbard, the treasurer of the company, are so apposite that I take the liberty of reproducing them :—

> To those who read accounts of social betterment it may seem a most simple and easy matter to create a model community. Build attractive houses, establish an institute with a trained social secretary, and they think the rest will follow. How little they realise how much time, work, tact, patience, perseverance and charity will be required to bring about the desired result. They will encounter racial prejudices, local and personal jealousies. They will have to repress the inefficient would-be leaders and to draw out the efficient but reluctant ones. We often read glowing accounts of social betterment carried on by such and such a concern; shortly afterwards of the establishment being the centre of a disastrous strike; later, possibly, that the whole attempt at social betterment has been given up as a failure. Then it is safe to say that it was not conceived in the right spirit nor carried on in the right spirit; that it was either dictated by self-interest or executed in a spirit of condescending patronage. Social betterment, to be successful, must first be free of any suspicion that it is designed to take the place of wages; second, that it must not be too paternal, or suggest that the recipient of its benefits does not know how to obtain them himself; third, the ideals aimed at must not be too far removed from actual conditions; fourth, as far as possible and continually more and more, the people should assume the management.
>
> It may be stated generally that experiments in social betterment have been judged too hastily to have been successes, or to have been much greater successes than they really were. Many have been failures. Of these we rarely hear.[1]

With almost the whole of this I heartily agree. Mr. Hubbard states the conditions of success and the cause of many failures in terms which cannot be improved; but

[1] *Bulletin of the Bureau of Labour*, Washington, No. 54, p. 1213.

when he says it is safe to assume that the spirit or method is at fault in all cases of failure he is speaking too positively. There is a real antagonism between the principle of trade unionism and that of employers' benevolence. And more than that, labour legislation, which is to a large extent the expression of labour organisation, tends to stifle benevolence. The voluntary does not thrive in the presence of the compulsory. The comparatively backward state of labour legislation in the United States means more room as well as more need for employers' benevolence to take its place.

Both legislation and organisation are advancing forces, and as they advance private action recedes before them, and to them a third must be added in municipal activity which more and more takes upon itself and out of the hands of employers the well-being of the people. But in any case benevolent institutions affect such a minute proportion of the industrial population that they do not form an appreciable item in an international comparison.

CHAPTER XI.

HOUSING.

HOUSING is unquestionably the most important of all home conditions, and it is naturally one to which increasing attention is directed in all western countries. This is due to two causes: (1) the growing knowledge of sanitation and recognition of its influence on health; (2) what I call the progressive urbanisation of the people, which accompanies the development of industrial activity. The two go together, of course, and react on each other, but each has a special bearing on the two main problems connected with housing; sanitary demands make the question of quality, urbanisation makes that of quantity, acute. It is as well to bear the distinction in mind, because though both problems are present in some degree in all large communities and are generally mixed up together, their relative importance differs greatly in different countries and different districts. That is found to be the case when we come to compare England, Germany, and America.

A great deal of detailed information on the subject has been given in the descriptive chapters, but it is scattered about under the headings of the towns or districts described, and I cannot expect any reader to draw from it any definite conclusion such as is present in my own mind. The subject requires more comprehensive and systematic treatment, and I will therefore take the more important points seriatim.

Rent.—Numerical statements of rent are subject to the same kind of difficulty, though in a lesser degree, as similar statements of wages; that is to say, the amounts vary within wide limits not only in different places but in different parts of the same place according to the situation and character of the houses. The reduction to an average, therefore, is open to the same objection as in the case of wages; it can only represent the truth approximately, and any such statement must be read with a large margin on both sides. Subject to this reservation I give the average weekly rent for an unfurnished room as obtained by inquiries on the spot in a number of industrial centres as nearly as possible of the same character:—

Average Weekly Rent per Room.

England.	Germany.	America.
s. d.	s. d.	s. d.
1 3	2 0	2 6

In this computation I have not included the capitals, where rent is higher than almost anywhere else, but have followed the plan adopted throughout and have taken the most purely industrial provincial towns, where the conditions are most strictly comparable. It is necessary to bear the explanation in mind, because the subject of housing is most often discussed in relation to the capitals, which are not only most prominent in themselves, but also present the problem in its most acute form. This is one of the respects in which they are not representative, and one of the principal reasons why they are excluded from my survey. People are very apt to generalise from the capital, as I have previously pointed out, but in relation to housing it is particularly fallacious. The fallacy is greatest in the case of London and least in that of Berlin, which is more typical of modern urban Germany in regard to housing

than in any other single respect. If, therefore, any students of the subject, particularly in England, are surprised at the lowness of the figures given, I trust they will remember to what it applies.

I have, in fact, put the figure for England a little higher than I might have done, in order to be on the safe side; and the only official information I have been able to discover bears me out. It is contained in the Second Series of Memoranda, etc., prepared by the Board of Trade (1904). There the average annual rental of the working-class houses in typical working-class streets in twenty provincial towns is given as £12 4s. in 1900. If we assume, as we may pretty safely do, that such houses are, on the average, four-roomed houses, the mean weekly rent per room works out at 1s. 2d., which is exactly what my own inquiries made it.

The same Blue-book gives a good deal more information about rent in England, but, unfortunately, the unit taken is the house, which is a too elastic term. It renders the figures as they stand quite useless for purposes of international comparison, because, as we shall presently see, a "house" or "dwelling" means very different things in different countries. The unit of comparison must be the room; and, since rent in England is always reckoned by the week for working-class houses, I have reduced it to the same scale in all cases. In Germany it is generally reckoned by the year, in America by the month. For Germany I have no official information except that in Berlin, the average weekly rent of a room, as ascertained by a recent investigation of 908 households, is 4s.[1] This may be compared with London. According to returns furnished by the Charity Organisation Society, and quoted

[1] *Reichs-Arbeitsblatt*, March, 1905.

in the Board of Trade Blue-book,[1] the average weekly rent in 1899 was, for a single room 3s. 5½d., for two rooms 5s. 8d. and for three rooms 7s. 2d., which gives an average of 2s. 8½d. ; the average weekly rent per room in County Council, municipal and trust tenements was 2s. 3d. These figures show roughly that the higher level of rent in Germany holds good of the capital also. The figure I have stated—namely, 2s.—for industrial centres corresponds with those given in Harnisch's *Jahrbuch*, but, as that statistical annual only refers to the Rhineland province, where housing is particularly dear, it may be too high for the country as a whole. In Chemnitz I found the average weekly rent of a room was about 1s. 6d., although the "house famine" is very acute there; and outside the town, where many workmen live, it is considerably less.

With regard to the United States a great deal of information on the subject has recently been compiled.[2] If official investigations on the same scale had been carried out in other countries it would be possible to make statistical comparisons with far more confidence than is justified at present. These remarkable returns cover 25,440 families, representing 124,108 persons in thirty-three States, and they give in great detail the occupations, family conditions, earnings, expenditure and other particulars. I here merely extract some of the information relating to rent. The States contributing the largest number of families to the inquiry are, in the following order: New York, Pennsylvania, Massachusetts, Ohio and Illinois, which are all great manufacturing States. The average weekly rent of a room in these States works out as follows, omitting small frac-

[1] Cd. 1761.

[2] *Eighteenth Annual Report of the Commissioner of Labour*, 1903.

tions: New York, 2s. 1d.; Pennsylvania, 1s. 10d.; Massachusetts, 2s.; Ohio, 2s. 1d.; Illinois, 1s. 9d. The mean is a fraction under 2s., and the mean for the United States is somewhat less, namely, 1s. 10½d. This is very appreciably lower than my estimate of 2s. 6d., given above, and I do not question its accuracy for a moment. It does not upset my estimate, but so far as the two are parallel rather confirms it. They are derived from different fields of inquiry. Mine is confined to a limited number, about a dozen, of the leading centres of particular industries, presenting conditions most comparable with the corresponding centres in England and Germany. The official inquiry relates to a very much larger number of places, including comparatively small ones, and it does not embody the mean of each locality, but the mean of all the families derived from the aggregate of localities. The places are not named, so that I am unable to check my results by a nearer comparison. I have no doubt that the official figures are much more representative of the United States as a whole than mine, and if corresponding information were available for the other countries a more satisfactory comparison could be made; but they are not, and I must compare like with like. If the same basis were taken for the other countries I have no doubt at all that the result would be correspondingly lower. The average figure for England would not be more than 1s.[1] and for Germany 1s. 6d. It may, I conclude, be taken as a rough general rule that rent in America is about twice as high as in England,[2] and that Germany comes between, but rather nearer the American than the English level; and in

[1] This is the actual average for houses let by Co-operative Societies in twelve provincial towns (Blue-book, Cd. 1761).

[2] This estimate is substantially in agreement with the conclusions of the majority of the English trade unionists who formed the "Moseley Commission" in 1902.

England the rent includes local taxes, or rates, which is not the case in Germany or America.

In all three countries rent has been rising of late years, but the only comprehensive information I have been able to obtain is that contained in the Board of Trade Blue-book previously mentioned. The following index numbers for the course of working-class rents in large towns in Great Britain are given :—

Relative Working-class Rents.

1880	86·6
1885	90·1
1890	89·9
1895	96·3
1900	100·0

The chief reasons for the rise of rents in England are the increase of wages in the building trades and the increase of local rates. Both in Germany and America the rise has been more rapid, so far as I can ascertain, no doubt on account of the more rapid growth of the urban populations and the consequent demand for accommodation.

Density.—The next point of importance is the distribution of the people in the houses and the "density" of population. Density may be measured in three ways. The usual way is to take an area and divide the population by the surface; if you are dealing with a large area the result is stated as so many persons to the square mile or equivalent measure; if with a smaller one as so many persons to the acre or hectare. There is a certain value in these statistics, but they obviously bear no necessary relation to the housing; in one place the people might be massed together in a small space and densely crowded under roofs, while a large area of unoccupied ground outside would bring down the nominal "density" to a very low point; in another place the opposite conditions might occur. The

next way is to divide the population by the number of "houses," which gives a much more valid measure of the living density. The third way is to divide the population by the number of rooms. A combination of the last two, the one giving the superficial the other cubic living density, would throw most light on the housing, but unfortunately no comprehensive *data* are available with regard to the number of rooms. We must do the best we can with the number of houses, aided by such other information as can be gained in one quarter or another.

AVERAGE NUMBER OF PERSONS TO A HOUSE.[1]

England (1901).	Germany (1900).	U.S.A. (1900).
5·2	8·9	5·3

It is at once clear even from these summary figures that the house density is much the greatest in Germany and the least in England; but of course such a general comparison does not represent the relative conditions of urban life in the three countries. Urban density is always greater than rural, and since the rural population is a very much smaller proportion of the whole in England than in Germany or America it is evident that the disparity in urban density must be considerably greater than that shown above. The inference is confirmed when we take smaller units of comparison. Let us first compare some industrial areas.

AVERAGE NUMBER OF PERSONS TO AN INHABITED HOUSE.

ENGLAND.

Lancashire	4·9
Yorkshire (W. Riding)	4·5
Staffordshire	4·9

[1] The terms used are "inhabited house" in the English census, "inhabited building" in the German, and "dwelling" in the American.

GERMANY.

Saxony	11·69
Rhineland	8·52
Brandenburg (without Berlin)	10·88

U.S.A.

Massachusetts	6·3
Pennsylvania	5·5
Rhode Island	6·7

Here the relative positions are much more clearly marked; but a comparison of towns makes the point still plainer. I give ten large towns, partly commercial and partly industrial, including the capitals:—

AVERAGE NUMBER OF PERSONS TO A HOUSE.

England.		Germany.		U.S.A.	
London	7·9	Berlin	46·6	New York	13·7
Manchester	4·9	Breslau	39·1	Chicago	8·8
Birmingham	4·8	Leipzig	27·0	Philadelphia	5·4
Leeds	4·5	Dresden	27·5	Boston	8·4
Sheffield	4·8	Hanover	20·1	Pittsburg	6·3
Bradford	4·3	Düsseldorf	19·4	Providence	7·0
Bolton	4·6	Chemnitz	29·1	Fall River	11·0
Oldham	4·5	Elberfeld	18·7	Lowell	6·9
Halifax	4·2	Barmen	18·0	Lawrence	7·7
Wolverhampton	4·8	Essen	18·6	New Bedford	7·1
Mean	4·9	Mean	26·5	Mean	8·2

It will be seen that the capital occupies an exceptional position in each country; London is 61 per cent. above the English mean, Berlin 76 per cent. above the German, and New York 67 per cent. above the American. These figures afford numerical proof of my contention that the conditions of life in the capitals are not typical of a country. Yet the house-density in London, relatively high as it is to that of the provincial English towns, is appreciably less than the American mean and less than one-third of the German. The table is an eloquent statement of the most salient

difference between the conditions of urban housing in the three countries. It means in practice that in England the industrial classes live in small separate houses or cottages, in Germany they live in barracks, and in America in larger houses which are shared by more than one family. That is the broad fact; the statistical evidence fully corroborates the observations I have previously made on the point in the descriptive chapters.[1] In the whole list only one American city approaches the English standard, and that is Philadelphia; I have already pointed out its exceptional character.[2]

I regard this fact as of cardinal importance in the life of the people, and will pursue the evidence a little further. It may be objected that the lists are selected. Every list is selected, but these are not selected for the purpose. They include the most important of the representative industrial towns embraced in my survey, together with the capitals and some others of mixed character, as fairly comparable as possible. A different selection would, in my opinion, be less representative, but in order to put the matter quite fairly I will mention some exceptions and modifications.

In England the towns on the Tyne form an exception; at Newcastle, Gateshead and Shields the average number of persons to a house is a shade over eight, but the conditions here are quite unusual. On the Tyne rents are exceedingly high, much higher than anywhere else out of London, and it is the custom for families to share a two-storied house, one on the ground, the other on the upper floor. There are also some tall, old buildings let as tenements. On the other hand, in the great majority of English

[1] Vol. I., pp. 256, 260.
[2] Vol. I., p. 308.

industrial towns the house density is lower than the mean given above.

In Germany some towns of importance have a lower rate than those on the list. For instance, the number of persons to a house in Cologne is 15·5; in Frankfort-on-Maine, 17·5; in Aachen, 17·3; and in some of the smaller Saxon manufacturing towns it is still less, as in Glauchau, 11·3; Meerane, 10·4; Zittau, 13·7. On the other hand, most of the remaining great towns, such as Magdeburg, Stettin, Konigsberg and Posen much exceed the average given above, and in Charlottenburg the density is even greater than in Berlin.

With regard to the United States it is necessary to discriminate. There are many towns of small and medium size with a house density very much the same as the English standard, and some of these, such as Dayton and Springfield in Ohio, are manufacturing towns. Generally speaking the type in the south and west, and to a certain extent in the central States, is different from that indicated above; and if we take the great towns in all the States and compare them with all the great towns in England we get a different result. There are in the United States sixteen, and in England fourteen towns with upwards of 200,000 inhabitants; the average number of persons to a house is 7·2 in the former and 5·3 in the latter. The discrepancy is here considerably less than in the table given above. If other units of comparison are taken the results differ again, some showing greater and some less discrepancy. But in all cases the English density remains below the American, and there is not throughout the States a single town of 25,000 inhabitants with so low a density as the large manufacturing towns of Halifax, Huddersfield and Rochdale in England. However the facts be examined, the conclusion emerges that

housing is more spread out in England; and the more strictly the comparison is confined to important industrial centres the greater the discrepancy. If the reader is not tired of statistics I will refer to one more table in the United States Census, which puts the facts in a different and, perhaps, more instructive way.[1] It classifies the dwellings according to the number of families living in them, and gives the proportion of families living in each class, namely, dwellings with one, with two and with three or more families. I extract from this table the following particulars for the towns having over 100,000 inhabitants in the Eastern and Central States, which are the great industrial States:—

House Density in American Industrial Cities.

City.	Percentage of Families in Dwellings having more than One Family.	
	Two Families.	Three Families and over.
New York (New York)	11·5	71·0
Chicago (Illinois)	28·6	42·4
Philadelphia (Pennsylvania)	9·6	5·9
St. Louis (Missouri)	40·3	18·3
Boston (Massachusetts)	26·5	41·3
Baltimore (Maryland)	20·0	7·4
Cleveland (Ohio)	25·1	13·1
Buffalo (New York)	29·1	23·9
Cincinnati (Ohio)	23·0	44·1
Pittsburg (Pennsylvania)	24·6	11·0
Newark (New Jersey)	29·4	40·4
Jersey City (New Jersey)	21·4	46·8
Providence (Rhode Island)	43·9	19·1
Rochester (New York)	15·6	8·3
Toledo (Ohio)	10·2	3·8
Allegheny (Pennsylvania)	31·5	11·0
Columbus (Ohio)	11·9	8·0
Worcester (Massachusetts)	28·5	46·2
Syracuse (New York)	32·9	10·9
New Haven (Connecticut)	38·6	21·7
Paterson (New Jersey)	46·5	26·4
Fall River Massachusetts	29·0	54·4

[1] *Twelfth Census*, U.S.A., vol ii., table xcviii.

In these twenty-two great towns the proportion of families living two or more together in a dwelling ranges from 14 to 83·4 per cent. The two showing the greatest house density are New York and Fall River, the two showing the least are Toledo[1] and Philadelphia; in the former more than four-fifths, in the latter about one-seventh of the families live more than two together in a dwelling. Out of the whole number, thirteen have more than half their families so living.

It must further be remembered, in comparing the United States with England or with Germany in this respect, that the proportion of population living in large public institutions such as barracks and work-houses, which count as houses and so tend to increase the statistical house density is much greater in the two latter.

I believe that the evidence here adduced fairly represents the broad differences between the three countries in this important matter; but the impression made by observing those differences in actual life cannot be conveyed by any figures.

Overcrowding.—The house density, however important as it is, does not necessarily furnish a measure of the space accommodation, for houses may be large or small and the term by itself tells nothing. What is called "overcrowding" is usually measured by the number of persons to a room; and the official standard adopted in England is two persons; more than two to a room is called overcrowding. Of course the size of rooms varies and the measure is rough, but it is more exact than that of houses. Only the English census gives statistics concerning the number of persons to a room so far as I can ascertain, but some official informa-

[1] Toledo is distinguished by having the largest proportion of houses owned by their occupiers of all the large towns, namely 46·0 per cent.

tion for the United States also is available. I have not been able to find corresponding information for Germany, although the question is much more acute there.

In England the proportion of the population living in overcrowded conditions, as defined, was 8·2 in 1901. In the rural districts the figure fell to 5·8, in the urban it rose to 8·9. Turning to the towns we find the greatest amount of overcrowding on the Tyne, where the proportional figure reached 34·5 (Gateshead); and the least at Northampton, where it was less than 1 per cent.; in London as a whole it was 16·0, but in the most crowded district (Finsbury) it reached 35·2; in the Lancashire towns the highest was 13·3 at Wigan and the lowest 2·6 at Preston; nearly all the manufacturing towns in this county were well below the urban mean mentioned above (8·9); the Yorkshire towns were above it, ranging from 9·5 at Sheffield to 14·6 at Bradford. In other large towns we have the following: Birmingham, 10·3; Nottingham, 3·6; Leicester, 1·0; Bristol, 3·5; Hull, 6·1; Portsmouth, 1·1; Wolverhampton, 4·6.

It cannot be said that a review of these facts bears out the prevailing impression that a very large proportion of the industrial population in England lives in a condition of overcrowding. And if we examine the movement in regard to housing, it appears that in spite of the growth of population in the towns the density is diminishing. The number of persons to a house fell from 5·32 to 5·20 between 1891 and 1901, and the proportion of overcrowding in the houses from 11·2 to 8·2. The census remarks: "However the tenement figures for England and Wales are compared it is impossible to avoid the conclusion that the comparison affords satisfactory evidence of distinct improvement in the housing of the people during the ten years 1891-1901". In short, outside of London and a few other special localities

the problem of *quantity* is not acute, and in most of the provincial towns it does not exist at all; the supply is nearly adequate and becoming more so. And even in London the acute difficulty is confined to the inner area; outside, in Greater London, the working classes are housed in separate cottages as elsewhere, and the supply keeps pace fairly with the demand. I have watched during the last fifteen years the erection of many hundreds of miles of streets, consisting entirely of such houses, on the northern and eastern fringes. We have nothing to compare with the "house-famine" which prevails in Germany; and the comparatively low rents in England are one result of this comparatively abundant supply.

The official information available for the United States is contained in the eighteenth annual report of the Commissioner of Labour (1903), which consists of the special inquiry into 25,440 families, to which I have already referred. The average number of rooms per family and per individual is given for 23,447 families distributed in thirty-three States. The summary results are as follows:—

States.	Average Size of Family.	Number of Rooms.	
		Per Family.	Per Individual.
North Atlantic States .	4·68	5·21	1·11
South Atlantic States .	4·96	4·81	·97
North Central States .	4·86	4·74	·98
South Central States .	5·09	3·80	·75
Western States . .	4·06	4·70	1·16
United States . . .	4·75	4·95	1·04

In the separate States the number of rooms per individual ranges from ·63 in Tennessee (rented house) to 1·68 in New Hampshire (owned house). The number of rooms

is generally a little higher in owned than in rented houses, which are distinguished in the returns, and it is a shade higher for the native than for the foreign families, namely 1·08 against 1·00.

Of course these figures prove nothing about over-crowding at large. The inquiry may not have touched the lowest strata of the population at all, and it is probable that it did not, for the enumerators would not go to the lowest strata to fill up their schedules which were of a very elaborate character. Moreover, a good average may conceal some bad single localities. But they do prove that in the large number of families covered by the inquiry there could have been very little over-crowding and that on the whole there was a strikingly liberal allowance of room space. And in my opinion they go far to prove that the room density of the decent industrial population is decidedly less in the United States than in England. No exact comparison can be made, but the following facts give some indications. The average number of rooms to a family in those industrial States which contributed most schedules to the inquiry was: New York, 4·83; Pennsylvania, 5·35; Massachusetts, 5·51; Ohio, 4·21; Illinois, 4·91. In 1901 the proportion of houses in England consisting of four rooms and upwards was 75·9 per cent., and of five rooms and upwards 53·2 per cent. of the total, and the proportion of the population so housed was 82 and 60·1 per cent., but I doubt if an examination of average working-class houses in any district would show so high a number of rooms to a family as in Massachusetts and Pennsylvania. I draw the conclusion, which agrees with my own observation, that working-class houses of five and six rooms are commoner in America than in England, where the four-roomed house is the rule, though newer ones are generally larger.

The information about overcrowding which I have for Germany is scrappy but striking.

In Berlin the special investigation of 908 households, to which I have previously referred, gave the following remarkable results :—[1]

Households.	Persons.	Rooms.	Rooms to a Dwelling.	Persons to a Room.
908	3,828	1,261	1·4	3·03

The overcrowding here shown can only be called gross, and the more so because the households do not appear to belong to the lowest grades of society. The occupations of the heads were very varied but the great majority belonged to the artisan class, the incomes ranging from £35 to £40 (only two single households) up to £150 (one household of thirteen persons). The incomes of 599, or roughly two-thirds, ranged from £65 to £100. The average weekly rent per room was 4s., which was nearly 3d. less than the average asked for empty rooms in Berlin at the beginning of 1904.

But, as I have repeatedly pointed out, Berlin is an exception. A more representative case is Barmen, for which I have a little information; its place in the table given above shows that the house density is less than in most of the large towns, and therefore it is a fair case to take.

In Barmen the police made an examination of 100 houses inhabited by the labouring class in the year 1897; they contained 2,106 rooms and attics and were inhabited by 882 families numbering 4,787 persons. The average was twenty-one rooms, inhabited by nine families of forty-eight persons, to each house; and the average number of persons to a room was 2·25. Taking the English standard

[1] *Reichs-Arbeitsblatt*, March, 1905.

of overcrowding (more than two persons to a room) I find that the proportion of the tenants of the model dwellings, built by the Barmen Building Company, so living in 1897 was 16·01 per cent.

The Krupp houses at Essen are a good specimen of superior German housing and they are on a large scale. I have already given a full account of them and only mention them here for the light they throw on overcrowding. I find that the number of persons living in them in May, 1900, was 26,678. The number of dwellings was 4,274, including the pensioners' colony, and the number of rooms 11,435 or a few more.[1] The average number of persons to a room is 2·1. As a good many of the houses are occupied by superior officials the average of the workmen's dwellings is probably a little higher. It must, however, be remembered that the birth-rate is very high in Essen and the families very large. This factor holds good in general of Germany as compared with England and America and it ought not to be forgotten. It is easy to avoid overcrowding when people avoid having any children, and as a matter of fact the diminished birth-rate is largely responsible for diminished overcrowding in England and America.

I have a little more information, of a less official character, for Düsseldorf, a town which has been very hard pressed by the urban inrush. At the same time it throws light on the question of rent and some other points, so that I will give it rather more fully. It is derived from a special inquiry conducted on behalf of the Provident Building Society (*Spar-und-Bau Verein*) in 1900. It appears to have been instigated by the fact that in the previous winters the town authorities were compelled to find shelter

[1] Eighty-four of the houses have seven rooms "and over," so that a little margin must be allowed.

for a number of homeless families, the heads of which were not out of work or very poor, or unable to pay rent, but simply homeless, largely because they had children; for in Germany, as elsewhere, one result of the excessive demand for housing is that people refuse to let their rooms to tenants with large families. The inquiry was conducted by the local trades' council or association of trade unions, which sent out a question form to be filled in by the workmen with particulars as to occupation, earnings, number and age of children, rent paid, number of rooms, etc. An important feature of the inquiry is that it relates, not to the lowest class of the population, but to married workmen of all kinds in fair employment. Particulars were obtained of 194 families. Their average earnings were 4s. a day; 111 lived in two rooms, 68 in three rooms, 11 in four, three in five, and one in six rooms. The four-, five-, and six-roomed families, however, either lived in old farm-houses on the edge of the town or took in lodgers. The inference is drawn that 60 per cent. of the fairly-paid class of workmen in Düsseldorf live with their families in two-roomed tenements. The average rent paid for this accommodation was 3s. 8d. a week; but it is remarked that all the dwellings at this rent or below it, except those erected by a charitable trust or by factory owners, are on the extreme outskirts of the town, and that the cheapest, which bring down the average, are attics, or "little boxes in old farm-houses". The better dwellings were rented at 4s. a week and upwards for the two rooms, and the highest were 5s. 4d. a week. One man, a smith, earning 1,050 marks in the year, had to pay 280 for rent, leaving 14s. 9d. a week to live on; he had two children, aged nine and eleven. That makes 37 pfennigs a day per head; the prison scale is 80 pfennigs. The children in these two-roomed dwellings were

of all ages from infancy to twenty-one, and the number in each family ranged from one to six; but for the most part workmen in good employment with more than three children make shift to get three rooms, and, of course, pay a higher rent. One case on the list was that of a day labourer with nine children who had 10s. 8d. a week to live on after paying his rent. The houses are all of the tenement class; the average number of families to a house was 8·14, and the average number of persons 40. Remarks appended by the workmen go to show that even the dwellings for which the rent is over 2s. a week per room are often very defective and insanitary, and cases are given of the constant and rapid rise of rents. One man who paid 27s. 6d. a month for three rooms had his rent raised thrice in the course of the year, until it stood at 40s., or 8s. 11d. a week. This represents 3s. a week per room in a tenement building.

Experience has taught me to regard "shocking revelations" with profound distrust, and of course a report of this kind, which has a distinct object in view, is not intended to make the best of things; but it is quite in keeping with other information and with the results of personal observation, and I believe it substantially represents the truth.

The facts with regard to overcrowding revealed in the report are as follows: In the two- and three-roomed dwellings there were 179 families consisting of 789 persons, and they lived in 426 rooms. The average was 1·8 persons to a room, and the actual proportion of persons living more than two in a room was 41·3 per cent.

In the working-class tenements built by the town the average number of persons to a room was 1·3 and the average weekly rent 2s. 3d. per room.

These scattered details afford a certain insight into the

worst feature of German housing, which is the worst feature of German industrial life. They show a very great inferiority to England and America in regard to the quantity of accommodation. In Germany there is a real "house-famine," as it is commonly called; in England and America there is not, save in some specially congested localities, which are more numerous in the latter than in the former. One of the principal causes of the difference is the more recent and more rapid change in the character of the population.

To judge from villages, small old-fashioned towns, and the older parts of modern cities, a considerable part, at least, of the industrial population used formerly to be housed in single dwellings, as in England. The general and ever-increasing extension of tenement or barrack housing has arisen from the demand for urban accommodation which has accompanied the industrial expansion of the last thirty years. The beginnings of that need, which has developed into the house famine of to-day, go back somewhat earlier. Alfred Krupp found himself obliged to provide housing for his workmen in 1863; a building company was started in Bonn in 1864; one in M. Gladbach, of which some account has been given, in 1868, and one in Barmen in 1872. But these earlier efforts in the Rhine province were isolated; the pressure was not generally felt until later, and it increased gradually as the towns drew the people in from the country. It is during the last ten or twelve years that the trouble has become really acute. The remarkable period of prosperity which culminated in 1900 caused a great demand for labour; and a stream of foreign immigrants, including Poles and Italians, flowed into the industrial centres. Their presence is attested by the fact that it has been found necessary in some of the Rhine towns to put up public

notices in those languages. At the same time, the native rural population was steadily moving townwards, and emigration over seas dropped down to insignificant proportions. It is not generally realised that in recent years Germans have almost ceased to emigrate; the number leaving the country dropped from 220,902, or 48·6 per 10,000 of the population, in 1882 to 20,874, or 3·7 per 10,000 of the population, in 1901. During the recent depression it only rose again to 6·0 per 10,000 in 1903. The shifting of the industrial balance is indicated by the following figures from the last two occupational censuses :—

Year.	Agricultural Population.	Industrial Population.
1882	18,840,818	16,058,080
1895	18,501,307	20,253,241

The "rural exodus" between 1895 and 1900 is further shown by the fact that the population of East Prussia actually diminished in that period, and the increase in Pomerania and Posen was only 3·9 and 3·2 per cent., whereas in the industrial regions of Westphalia, Rhineland and Saxony it was 18·0, 12·8, and 10·9 respectively.

A statistical comparison of the "urban" and "rural" populations and of their changing relations in the three countries is not satisfactory because the bases of computation are different; but some light on the comparative rapidity of the movement is thrown by the statistics of the great towns having over 100,000 inhabitants and their relation to the rest of the country.

Percentage of Population in Great Towns.

England.		Germany.		U.S.A.	
1881.	1901.	1880.	1900.	1880.	1900.
31·6	35·0	7·2	16·2	14·6	18·8

Although the proportion of the population massed in these great aggregations is less in Germany than in America and much less than in England, the pace at which they have absorbed the population and their relative increase since 1880 has been enormously greater in Germany than in either; and the fact indicates a much more rapid process of urbanisation, which goes far to explain the greater acuteness of the housing problem. In England, of course, the thing has been going on for a very long time, and the conditions have become better adjusted to the need; and the same holds good in a less degree of the industrial districts in America. In Germany the change has been more sudden. Indeed, the actual rate of increase has been only very little less in the German than in the American great towns; they have grown nearly 230 per cent. since 1871.

The state of things described above obviously provides the Social Democrats with a powerful lever for pushing their views, because the private ownership of land is one of the causes of costly building; and the great increase of their polls in the Ruhr district in particular coincides with the growing house famine in the iron and coal towns of that region. But private ownership is not the only cause, if indeed it is a cause at all; otherwise housing would be equally dear in English manufacturing towns. I have been informed by a good authority that the system of tenure is largely responsible for the difference. In Germany conveyancing is the simplest matter; the two contracting

parties go before the local official, pay a small fee, and the thing is done. Consequently people will not take land on a lease for buildings; they buy outright, which entails a heavy initial outlay, though it may be good economy in the end. Then the cost of materials appears to be very high; it has risen of late years, as that of labour has risen; these two account for a large part of the increased cost of building, and to them must be added the requirements of modern administrations under the law. You cannot have bye-laws and inspectors without paying for them. These we have, too, in England, and they are partly responsible for the rising cost of housing; but I have little doubt that the superior manner in which urban extensions are generally planned and laid out to-day in Germany adds very appreciably to the cost. When that pleasant feature of German urban life is extolled, the accompanying drawback should not be forgotten. This brings me to the question of quality.

Quality of Housing.—Quantity and quality are often found in inverse ratio, and that is to some extent the case with housing; it is easier to satisfy a low than a high standard. Where scarcity is acutely felt in England, it is chiefly due to improvements and the abolition of slums; but the inference must not be pushed so far as to assume that the superiority in quantity which belongs to England is necessarily gained at the expense of quality and entails a corresponding inferiority in that respect. Some inferiority there is; the older urban movement, noted above, has left us with more slums on our hands. The word "slum" possesses no precise meaning and has never, so far as I am aware, been defined. What I understand by it is an area, which may be large or small, of houses marked by lack of air and space, by dilapidation, darkness, damp and

dirt, singly or in combination. These defects are more often found in older than in newer towns, partly through the mere lapse of time and partly on account of the character of the building, which took place at a period when no attention was paid to what we call sanitary conditions. Our old sea-port towns are the oldest, and being the oldest are the worst; but the inland towns are far from guiltless, and I have already given a good deal of detailed evidence on the point in connection with Bradford, Sheffield and Wolverhampton. The old crowded courts and back-to-back houses described furnish typical insanitary conditions.

The slums must be conceded; nor are they all old, as I have pointed out in the case of Bradford. The "housing problem" in England is, in fact, the problem of slums; it is one of quality rather than quantity except in so far as the improvement of quality entails deficiency of quantity. The slums are the chief seat of over-crowding, because the very poor congregate in them. During the last fifteen years I have examined so many of them in so many towns that I am not likely to underrate the magnitude or the importance of the evil as a feature of urban life; but I cannot insist too strongly on the fact that it is not an increasing but a diminishing evil. Astonishing improvements have been effected during the last ten, fifteen and twenty years, mainly through the operation of the public health laws. Some of our worst towns have been transformed; and the process is going on continuously, not uniformly, indeed, nor rapidly enough to satisfy medical officers of health, who are the most enthusiastic of all idealists, but still progressively. I am sure this is not at all realised. To judge from what is daily said and written on the subject, the prevailing notion is that the large

industrial towns in England are practically all slums and going from bad to worse, so that the process of urbanisation implies a constant worsening of the conditions of life for a constantly increasing proportion of the population.

I beg to enter an emphatic protest against this assumption, which is quite contrary to the facts. The proportion of insanitary housing is, I repeat, a diminishing quantity, though its amount varies greatly in different districts.

Apart from slums, working-class housing in England is generally of good quality and sometimes very good. The prevalent type is the four-roomed cottage, built of brick or of stone with slated roof; it has two rooms on the ground floor, one being the kitchen which is used as a living-room, and two above. It always has a yard at the back and sometimes a space in front. There is a tendency to increase the size, and newly built houses now often have five or six rooms and a bath-room with hot and cold water. A constant supply of water is now always laid on in towns and sometimes in villages. Water-closets are not yet universal, but are steadily extending in all towns; the process of conversion is continuously going on, though not yet complete; privies and middens have given place to pails and waste water-closets, the latter to full water-closets.

In Germany also old slums exist and have been energetically dealt with in recent years. The only means of making a comparison is by actual observation, and I have spared no pains to inform myself as fully and accurately as possible by external and internal inspection from which I have derived a very decided impression that, apart from over-crowding, insanitary housing is less common in Germany than in England. This is not due merely to the larger proportion of old premises in England, but quite as much to the superior habits of the people in Germany.

The home is rarely neglected; inadequate it may be in size, but it is kept clean and decent as are the children. In England we have a class, diminishing but still pretty large, which turns any quarter that it inhabits into a slum. This class is much less numerous in manufacturing than in trading centres, which accounts in some measure for the very superior housing of the former. No popular delusion is more contrary to the fact than the belief that foreigners are dirty compared with the natives of this country. I have been in the hovels of the rag-pickers in Paris, in the night-shelters of St. Petersburg, in peasants' cottages in Hungary and among the poor in the South of Europe, but nowhere have I seen people so dirty in their persons, and living in the midst of so much voluntary dirt as in this country. Our public sanitation is on a higher general level than that of any other land, but the habits of a considerable section of our people maintain a private sanitation which continually counteracts the efforts of the public health service. As for Germany there is no comparison in this respect. Poor and over-crowded as a German home may be, it very seldom has that horrible air of squalid misery, which is common in London, Manchester, Liverpool and similar towns, or that horrible fetid smell of stuffiness, of dirty humanity and accumulated filth which is much commoner, so common indeed here, and so seldom encountered anywhere else, that it may be called the national smell. In nearly every slum isolated homes are to be found, poor but clean, comfortable and well-kept, bearing witness to the voluntary character of the wretchedness around them.

Dilapidation, as well as dirt, is less common in Germany. Windows stuffed with rags or paper are never seen, rotten floors and leaking roofs very seldom. The construction and fittings of the newer-built houses are good and substantial.

Cess-pools, however, are still widely prevalent, though conversion to the sewer system is in progress. Water supply is fair, and sometimes very good.

Insanitary housing has not yet attracted much attention in America, apart from two or three great cities. Public opinion on the subject of sanitary inspection and regulation appears to be in such an early stage that of those municipal committees which issue reports some do not mention it at all, and others are constrained to argue that such inspection is necessary in the public interest. The older and larger towns have their full share of dirt, darkness and dilapidation, but I have been struck by the comparative absence of slums in manufacturing towns of medium size. There is, generally speaking, more light and air about the buildings than in corresponding European communities. Wooden houses are, of course, less solid and durable than masonry, and I have seen some in the last stages of dilapidation, but that is generally corrected by the process of conversion which I have previously mentioned. Old, tumble-down wooden dwellings tend to disappear and to be replaced by brick or stone as the town increases in size and importance. But sufficient care is not taken to ensure good conditions, and there is building now going on which defies all sanitary principles. It is often said, and not altogether without reason, that in England we are creating future slums on the outskirts of our large towns as fast as we clear away the slums in the centre. In America they seem to me to be creating future slums without clearing away the existing ones.

According to my observation, the homes are not so generally well kept as in Germany; with so many nationalities, less carefully trained in domestic duties, it cannot be expected. But ill-kept homes are certainly less common

than in this country, where drunkenness and neglect are more frequent among women than anywhere else. The recent investigation of the Bureau of Labour[1] secured some details for a certain (unstated) number of families, from which the following summary table is extracted:—

CONDITION OF HOMES, U.S.A.

Nativity of Head of Family.	Per cent. of Houses the Sanitary Condition of which was			Per cent. of Houses in which the Condition as to Cleanliness was		
	Good.	Fair.	Bad.	Good.	Fair.	Bad.
United States .	63·94	29·33	6·73	81·37	12·61	6·02
Foreign . .	58·11	37·00	4·89	77·13	17·60	5·27
Total . .	61·46	32·59	5·95	79·63	14·66	5·71

These statistics must be taken for what they are worth; but they are the only ones of the kind that I know of, and they are certainly interesting. The foreign families do not make such a bad show as might have been expected. If they had a somewhat smaller proportion of "good" houses than the natives, they had, on the other hand, fewer "bad" and more "fair". The general result, with only about 6 per cent. of "bad" houses, is creditable; but I should be very much surprised if a similar investigation in Germany did not produce a better result; and if I were allowed to pick my towns in England I would guarantee one quite as good. If, on the other hand, I had to take good and bad together, I am afraid that England would come out with a decidedly inferior record.

To sum up—

1. Housing is cheaper in England than in Germany or America, and cheaper in Germany than in America.

[1] *Eighteenth Annual Report of the Commissioner of Labour.*

2. House density (number of persons to a house) is least in England and greatest in Germany.

3. Room density (number of persons to a room), and by consequence overcrowding, is least in America and greatest in Germany.

4. Condition of houses is best in Germany and worst in England.

It is not easy to weigh these points against each other and to extract a positive summary statement that the working-classes are "better off" as regards housing in one country than in another. There is room for difference of opinion and for argument. My own view, which is based on somewhat extensive observation, as well as on the study of the statistical information outlined above, is, however, clear, and I give it for what it may be worth. I consider that the advantages of the English cottage system—space, air, light and having "the place to yourself"—outweigh the inferiority of English urban housing in other respects, and being combined with a substantial difference of rent, place the English family in a distinctly superior position.[1] On the whole, that is to say; I do not mean that the occupants of slum areas, of old crowded courts and back-to-back houses such as I have described at Bradford and Wolverhampton, are better-off than the occupants of tenement houses at Elberfeld or Fall River. On the contrary, I think that the worst housing in England is certainly worse

[1] Mr. Budgett Meakin says, in *Model Factories and Villages* (p. 401), that at the model settlement of Ludlow in Massachusetts it was found that to secure an independent cottage, instead of herding in block dwellings, the workpeople were willing to pay more and take less accommodation. The experiment was made of building a few centrally situated modern blocks of flats, but, in the words of the manager, "This venture has not been successful at all so far, since no one apparently wants to live in a block, no matter how modern and well contrived. Cottages have had their educational value, and all prefer to live in separate houses."

than any in Germany, and probably as bad as any in America; but it is also much cheaper, its amount is comparatively small and diminishing and the occupants are more responsible for its bad condition.

As between Germany and America, I think the preference must be given to the latter, in spite of higher rents. Although some housing in America is worse than any in Germany, more of it is good, and its best is much better than Germany's best.

There remain some points to be noted.

Ownership.—It is often said that a much larger proportion of working-men own their houses in America than in Europe. If the agricultural population be included that is no doubt true, and it is probably true in a lesser degree of the industrial populations also. According to the United States census of 1900, out of the total number of houses of which the proprietorship was known, 46·5 per cent. were owned and 53·5 per cent. were hired; if the farm-houses be deducted the figures are: owned, 36·3 per cent.; hired, 63·7 per cent. That is to say, more than one-third were owned by their occupiers. The proportions vary greatly in different States; ownership is most common in such non-industrial States as the Dakotas, Wisconsin, New Mexico, Idaho, Utah and Nevada; least common along the Atlantic seaboard, South Carolina and Georgia having the lowest proportion of owned houses. Excluding farm-houses we get the following proportions in the more important industrial States:—

State.	Percentage of Owned Houses.	Percentage of Hired Houses.
New York	26·2	73·8
Pennsylvania	34·4	65·6
Massachusetts	31·6	68·4
New Jersey	31·0	69·0
Rhode Island	25·6	74·4
Connecticut	31·8	68·2
Illinois	39·5	60·5
Ohio	43·8	56·2
North Carolina	27·7	72·3
South Carolina	18·6	81·4
Georgia	20·3	79 7
Alabama	22·1	77·9

More instructive is a table stating the proportion of houses owned by private families in the chief cities, together with the proportion of such houses owned, free or encumbered; for a large proportion of houses nominally owned by their occupiers are not really so. I extract the following particulars for the same great towns which I have used above to show the house density:—

City.	Percentage of Owned Houses.	Percentage of such Houses Encumbered.
New York	12·1	57·8
Chicago	25·1	52·7
Philadelphia	22·1	45·3
St. Louis	22·8	37·6
Boston	18·9	51·1
Baltimore	27·9	26·5
Cleveland	37·4	43·0
Buffalo	32·9	51·9
Cincinnati	20·9	33·6
Pittsburg	27·2	44·3
Newark	21·1	59·6
Jersey City	20·0	44·9
Providence	21·0	47·6
Rochester	37·8	51·2
Toledo	43·0	42·3
Allegheny	25·5	36·6
Columbus	31·2	41·9
Worcester	24·9	64·9
Syracuse	37·4	55·6
New Haven	26·6	59·9
Paterson	23·2	60·5
Fall River	18·0	58·8

Of course these figures apply to all families and do not indicate the proportion of those belonging to the working classes that own their homes, but they suggest that the number is considerable in some of the communities cited. I notice, however, that the most purely industrial of them all, namely, Fall River, has the lowest proportion of any, except New York, and that most of the owned homes there are encumbered.[1] I have thought it advisable to give these authoritative details at some length, because there is a great deal of loose talk about the ownership of working-class homes in the United States. The information will help the inhabitants of other towns to make some sort of numerical comparisons for themselves. I have not been able to get sufficient *data* to make it myself, but it is an interesting point and worth following up. My belief is that ownership is more prevalent in America than in England, but the difference is not so great as is often assumed. In many of the English manufacturing towns in the North and the Midlands a very appreciable portion of the working-class families own their homes completely or incompletely. In Germany the number that do so is comparatively very small.

Housing Agencies.—In all industrial and commercial countries the greater part of the housing is provided by persons who build and deal commercially in houses and are commonly called "speculative" builders, though I do not see that their business is any more speculative than others, or why a speculative builder is an evil person while a speculative grocer or manufacturer or doctor is all right. The builder supplies a public want, and though he is generally abused it is he who really solves, or does most to solve, the

[1] With regard to nationality, the Scandinavians and Germans have the highest proportion of owned homes, then natives of America and after them the British.

"housing problem". But his activity is supplemented and to some extent corrected by other agencies, which have both negative and positive functions in the prevention of bad housing and the provision of good. The first of these functions is exercised by the local authority, with the assistance of sanitary or building laws, and it comprises both the abolition of old insanitary dwellings and the regulation of new ones. In Germany and in England much greater attention is paid to both than in America, as I have already indicated. No doubt this is necessary, and it has produced the improvements noted, but there is a danger of too much regulation. When bad housing is abolished at a rapid pace and at the same time building is discouraged or made dear by too stringent regulations the result is that poor families can find no homes at all or only homes which are beyond their means. And this condition is aggravated by the constantly rising standard of ease and comfort which, among other things, results in the refusal of accommodation to children.

The difficulty has developed the positive housing agencies, the function of which is to provide houses. They may be classified under the following heads—self-help, philanthropy, socialism. The self-help agencies include building, co-operative, friendly and similar societies; philanthropy is represented by the employers of labour, endowed trusts or corporations; socialism by the State and the municipality. It is only possible to deal very briefly with them here.

In England the most important are the first class. The building societies reached the highest point of prosperity in 1887, when they had a capital of 54 millions; in 1895 it had fallen to less than 43 millions, but in 1903 it had risen again to 48 millions, and there is probably quite as

much building activity of this sort as ever, if not more, for the co-operative and friendly societies have replaced the diminished activity of the building societies proper. The operation of philanthropic and municipal building is practically confined to London, if we except the proprietors of industrial model villages, which are not numerous, and the tentative efforts of a few provincial municipalities. In London, the County Council and various trust societies have erected a large number of tenement buildings which have transformed some areas; but this is quite peculiar to the capital. I have not been able to obtain any comprehensive figures of results, but the Registrar of Friendly Societies reckoned in 1901 that the building societies had enabled a quarter of a million persons to become the proprietors of their own houses.

In America also self-help has been by far the most prominent of the agencies. A number of different organisations based on the principles of thrift and co-operation are classed together as "building and loan associations". They apparently originated in Philadelphia about 1830, and have always flourished there, which perhaps accounts for the exceptional character of the housing in that city. In 1901 the Commissioner of Labour estimated the total number of such associations at 6,000, with a capital of 120 millions. The large proportion of owned houses in the United States is doubtless due to the great development of these concerns. The only form of philanthropic housing, so far as I can ascertain, is to be found in the model villages, but the aggregate results of these are relatively insignificant.

In Germany, on the other hand, the greater need has stimulated more varied effort, and though the self-help agencies are comparatively young and undeveloped, they have grown rapidly in numbers and activity. Some com-

prehensive information of what has been done in the Rhine-Westphalian provinces is available, and I summarise it thus.

1. The State has provided housing for its own servants and principally for the subordinate classes of railway men. In October, 1901, there were built or building in the two provinces 473 houses, containing 2,231 dwellings and 7,009 rooms, at a cost of £451,160, including sites. The interest on the total outlay comes out at 3·65 per cent. These houses are principally situated in the railway districts of Essen and Elberfeld, where the need is greatest. Further, in the Saarbrück coal mines, which belong to the Prussian Government, a system of helping the men employed, who numbered over 40,000 in 1900, to build their own houses by means of gifts and loans has been developed on a large scale. The gifts are to the value of from £37 to £45; the loans are free of interest up to £75, and at 3½ and 4 per cent. beyond that. The conditions are that the recipient shall be married and the owner of a building plot free of debt. The houses so built are, as a rule, single cottages for one family. The loans are repayable in ten years. Down to 1901 the total provided in gifts and loans amounted to £767,725. In addition, the administration itself erected houses for 441 families.

2. *Local Communities.*—Some municipalities provide houses for their own servants and for needy families; but a number of local authorities have gone beyond this and have built houses for the lower classes at large. This has been done in fifteen Rhine districts and five Westphalian. The earliest was the Merzig district, which was stimulated to the step by a housing investigation in 1894. Among the most active is Düsseldorf, which had in 1901 built dwellings for 141 families; 80 of the tenants were in the

service of the municipality. The 141 dwellings were thus classified : 43 of two rooms, 85 of three rooms, 13 of four rooms. Local authorities have further promoted building by lending money from the public savings banks at low interest, and by co-operating with building societies in various ways. They provide cheap building sites, take over shares, guarantee interest on loans, facilitate the laying out of streets, and reduce the ground and building rates.

3. *Building Societies.*—Details from 109 societies in the Rhine province were furnished to the Düsseldorf Exhibition in 1902. The 109 consisted of twenty share companies, four limited liability companies, eighty-three registered societies, and two others. To these may be added thirty-seven unions in Westphalia, which also furnished details. Putting them together we get the following :—

Houses.	Dwellings.	Rooms.	One-Family Houses.	Two-Family Houses.	Three-Family Houses.	Four or more Family Houses.
3,877	9,714	32,467	748	2,155	377	567

Three-fourths of the houses, therefore, only contain one or two families. They are, in point of fact, semi-detached, and with gardens in the majority of cases, and are obviously a great improvement on the tenements of the speculative builder. The total expenditure on sites and building was £1,657,602. Of the houses 2,631 were sold and 1,216 were let : the amount paid off on those sold was £231,863.

Of the families occupying them, 9,331, or all but 383, belonged to the labouring class. The membership of the registered societies included was 18,428, of whom 14,226 belonged to the labouring classes. This is a substantial record for the very short time—not more than two or three

years—during which the greater number of the societies had been in active existence. Not the least service they have rendered is the steady adherence, except in the more central parts of the larger towns, to the principle of small houses and ample ground space. In the year 1901 more than one-fifth of the new housing required by the increase of population in the Rhine province was provided by the foregoing agencies, and was therefore of a superior character. Unfortunately, the rest of Germany has by no means exhibited an equal activity in this direction. It is reckoned that between one-fourth and one-fifth of the total co-operative building in the empire has fallen to the share of this single province. The total number of building societies in Germany at the end of 1899 was 356, of which the Rhineland claimed ninety-four. The exceptional efforts in this district have been largely due to the formation of a general building association in 1897, having its seat in Düsseldorf and enjoying the support of the provincial Government. The committee consisted of representatives of local authorities, and several previously existing building societies and companies and private manufacturers. Its origin is traced to the Old Age and Infirmity Insurance Law of 1889, which opened the way to a new movement in co-operative action. The association has stimulated the formation of new building societies with great success, and has promoted the housing movement in various ways. One of them is particularly interesting from the industrial point of view. Prizes were offered for designs for model furnishing, not to exceed the following cost: Kitchen, £8; bedroom (with one double bed), £10 10s.; living room, £12. They produced 122 sets of designs, many of great merit.

Similar associations have been formed in Frankfurt, Münster and Wiesbaden; but the earliest example is the

"*Arbeiterheim*" association in Bielefeld, founded by Pastor Bodelschwingh.

4. *Philanthropic Endowments.* — These are rather scanty. The most considerable is the Aders fund at Düsseldorf. The testator, a judge, left about £100,000, of which half was to be applied to educational purposes and half to the provision of dwellings at moderate rentals for factory workers, or others of the same class who were not in receipt of Poor Law relief. The town took over the fund in 1890, and in 1902 had provided out of it dwellings for 257 families, while the fund itself had risen to the value of £82,100. As it increases, in the course of time, it will play a correspondingly important part in the matter of housing. Other endowments in the district are the Krupp fund of £25,000 at Essen, the Guilleaume fund at Cologne, the Hösch fund at Düren and the Simonson fund at Godesberg. The aggregate number of dwellings provided from these endowments in 1902 was 364 at a cost of £107,300. They are only for rent, not for sale.

5. *Employers.*—In Germany manufacturers and mine-owners have provided a great deal of housing quite apart from "model" settlements. Employers have indeed done more for housing than all the other agencies put together. In 1902 the two provinces could show the following remarkable record, pretty evenly divided between them :—

Houses.	Dwellings.	Total Expenditure.	Loans and Gifts for Building.
22,269	62,539	£ 10,466,960	£ 268,896

Of the total number of families so housed more than half belonged to the mining industry. Their distribution, according to the census classification, was as follows :—

Mining, 32,396 ; iron, 16,471 ; textiles, 6,659 ; quarrying, 3,987; various, 3,026. Naturally, the housing provided for the mining population is chiefly situated in Westphalia, where about 19,000 dwellings have been built ; and the same industry accounts for £110,000 of the loans granted for building. The other industries preponderate in the Rhine province.

It is hardly necessary to add that savings banks, whether public or private, play an all-important part in the building and acquisition of workmen's dwellings.

One other agency which does not provide but greatly facilitates housing ought to be mentioned, and that is modern means of locomotion and particularly the electric tram or street railway. It is common to all three countries, nor is there much difference in the use made of it ; but that will be further discussed in a subsequent chapter under the head of " Locomotion ".

CHAPTER XII.

COST OF LIVING AND PHYSICAL CONDITIONS.

The cost of living, though a simpler question than some of those previously discussed, is not really simple; and the more closely it is examined the less simple it appears. It may admit, perhaps, of a broad answer, but certainly not of a very exact one.

The most complete classification of the items of expenditure comes, as might be expected, from Germany; it lays down six main headings and twenty sub-headings. I will reproduce them in full in order that the reader may see how complicated the subject becomes when it is approached in a thorough and methodical manner.

I.—Necessaries of Life:—
- (*a*) Rent, Fuel, Light.
- (*b*) Clothing.
- (*c*) Food: at Home and in the Eating-house.
- (*d*) Locomotion (Tram, Omnibus, etc.).
- (*e*) Tools.

II.—Compulsory Disbursements:—
- (*a*) Contributions to Sick Insurance, etc.
- (*b*) Taxes.
- (*c*) School-pence and Books.

III.—Bodily and Mental Recreation:—
- (*a*) Baths.
- (*b*) Public-house.
- (*c*) Spirits (presumably at Home).
- (*d*) Tobacco.
- (*e*) Newspapers and Books.
- (*f*) Amusements.

IV.—Voluntary Subscriptions :—
- (*a*) Insurance.
- (*b*) Club and Trade Unions.

V.—Other Regular Expenses.

VI.—Extraordinary Expenses :—
- (*a*) Doctor, Medicine, Sickness.
- (*b*) Furniture, Breakages.
- (*c*) Debt, Interest and Repayment.

Not all these headings are applicable to other countries; but it is obvious that the list, complete as it is, is capable of a great deal of further subdivision. Happily it is not necessary to go through all these items in order to compute broadly the relative cost of living. The important thing is the first heading, but the second must also be borne in mind, and particularly the taxes.

Of the necessaries of life we have already dealt with one large item—namely rent—in the last chapter, and we found that, broadly speaking, housing in corresponding localities is about twice as dear in America as in England, and that Germany comes between them. We now come to the cost of food, which represents roughly about one half, more or less, of the total expenditure of working-class families.

The cost of food can be ascertained in two ways, either by asking consumers what they pay for various articles or by asking dealers what they charge. The latter is very much the better way of the two, because the prices of most articles vary widely according to quality and the price which is given or alleged to be given by a particular family is no real measure of the cost at which the article can be obtained. For instance, in the report on retail prices compiled by the British Board of Trade in 1903 the price of tea is frequently put down as 2s. 6d. a pound and even more; but it would be absurd to take that as the price for

which tea can be obtained. This objection applies in some degree to almost every article of food, and it is strengthened by the tendency to name higher rather than lower prices as a point of pride. Many housewives would be torn to pieces sooner than admit that they are in the habit of buying inferior qualities. They are also prone to insist on the high price of things as a grievance. The dealer is rather disposed to emphasise the lowest prices, but that can be corrected by a little inquiry, and he has not the same inducement to make out a case. Of the two, therefore, the shop or market prices are a much safer guide than the statements of consumers; but the latter should not be ignored and the best way is to obtain both and check them by each other. I have made a point of doing so in many of the selected towns described in the first volume, and the information so obtained has enabled me to read official and other published lists with due discrimination.

By far the fullest *data* are available for the United States and they are contained in the eighteenth annual report of the Commissioner of Labour. They were obtained by special inquiry from upwards of 800 dealers in more than 100 towns distributed in thirty-three States; they give the prices of twenty-seven articles for each year from 1890 to 1903, and that in embarrassing detail. There are, for instance, from twenty to forty different quotations for fresh beef alone in several towns. The best way of extracting some compact but fair information from this huge mass of figures is to name the highest and the lowest quotations; and in my experience that is the only trustworthy way of dealing with food prices, because of the variations in quality. The only comparable information for England is that contained in the Board of Trade report already mentioned. It gives a considerable number of quotations from

several towns for the principal articles of food in the years 1900 and 1901. Unfortunately they were not obtained in the same way, but from consumers, and to any one who has investigated the subject it is at once apparent that superior qualities of many of the food stuffs are unduly predominant, notably in the case of bread and meat. The majority of the quotations only refer to the better qualities of both. For Germany tables of retail prices, compiled from official sources, are given in Neefe's *Statistisches Jahrbuch* for a number of articles in some twenty representative towns for a series of years. As the English returns are not brought down later than 1901 I will take that year for purposes of comparison and will reduce the measures and money values to the English standard; but it is to be noted that since 1901 prices have risen considerably for many important articles in the United States, which is not the case in England or, except quite lately for meat, in Germany. The American schedules given in the report cover very much wider ground than the English and the German ones, which only refer to selected towns of a commercial or industrial character. To make the comparison valid, therefore, it is necessary to select from the American list towns as nearly as possible of the same character. We then get the following result :—

RETAIL PRICES OF FOOD, 1901.

Article.	England.	Germany.	America.
Beef per lb.	4½d. to 11d.	5½d. to 9½d.	5d. to 1s. 5d.
Mutton ,,	4½d. to 1s.	5½d to 9d.	3d. to 1s.
Veal ,,	...	6½d. to 9½d.	5d. to 1s. 2d.
Pork ,,	...	7½d. to 10½d.	4d. to 8d.
Bacon ,,	6d. to 11d.	8½d. to 11½d.	5½d. to 10½d.
Flour ,,	1½d. to 2d.	1½d. to 2½d.	1d. to 2d.
Bread, 4 lbs.	4½d. to 6d.	3d. to 6d.[1] (rye)	10d.
Milk per quart	3d. to 4d.	2d. to 5d.[2]	2½d. to 4d.
Eggs per dozen	9d. to 2s.	7½d. to 1s. 2d.	9d. to 1s. 4d.
Fish per lb.	4d. to 8d.	...	4d. to 1s.
Butter ,,	10d. to 1s. 6d.	11½d. to 1s. 2½d.	11d. to 1s. 3d.
Sugar ,,	1½d. to 3d.	3½d. to 4d.[2]	2½d. to 3½d.
Cheese ,,	6d. to 1s.	...	6½d. to 10d.
Rice ,,	2d. to 4d.	...	2½d. to 5d.
Tea ,,	1s. 4d. to 2s. 8d.	...	1s. 8d. to 3s.
Coffee ,,	10d. to 1s. 10d.	1s. 2½d. to 1s. 9d.	7d. to 1s. 9d.

This table requires some further knowledge for its correct interpretation. The variations are due to difference of locality as well as of quality; for instance, the prices of many things are exceptionally high in Leicester, Mannheim and Boston, to take some cases at random. But quality is the main cause, and this is probably the reason why the range of fluctuation is less in the German column; more effort has been made to secure uniformity in the returns. Now this question of quality obviously complicates the task of making comparisons, and the complication is much greater than appears on the surface; for articles of food not only vary in price and grade in the same country, but they vary absolutely in quality between different countries; the best or the cheapest in one is by no means the same as

[1] Baked wheaten bread is seldom bought by working-class families in Germany.

[2] Obtained from my own inquiries, not given in the *Statistisches Jahrbuch*. According to a return published by the British Board of Trade the price of sugar, as consumed by the working-classes in Berlin, was 2¾d. a pound in March, 1905.

the best or the cheapest in another. This fact, though a commonplace of observation in ordinary life, is ignored by statisticians and dietarians, if I may coin a word; to them beef is beef and bread is bread, but the incomparably subtler analyst dwelling in every living thing discovers vital differences which are quite beyond the ken of the test-tube, the microscope or the scales.

Looking at the columns given above as they stand anyone would gather the impression that, with one exception, there is not very much difference. The exception is the high price of baked bread in America; it is double the price of bread of the same quality (made of American flour) in England. There is no doubt about the fact, which I have corroborated for myself in a number of towns in different States. I suppose the reason is that baker's bread is something of a luxury and home-baking the rule, as it still is in Scotland, in some towns in the north of England, and in rural districts generally. But for this exception, the importance of which English urban housewives will appreciate, the differences do not seem very great; and it would be easy to suppose that on the whole the average cost of food works out at much the same. If the German prices of meat are not so low, neither are they so high, and eggs are appreciably cheaper; if tea is cheaper in England than in America, coffee is dearer. And so on; it would be easy to make out a plausible balance. Germany may perhaps be at some little disadvantage, but in America the cost of food can be made out to be much the same as in England. I have in fact often seen that stated; but anyone who believes that it represents the truth in actual life is deceived. Some people like to be deceived and I am not concerned to deprive them of that pleasure; but others like to know the truth, and having been at great pains to

ascertain it for my own enlightenment, I will put the results at their disposal.[1]

If an English workman living at Bolton or Bradford or Sheffield emigrates with his family to Fall River or Philadelphia or Pittsburg—or from any English manufacturing town to a corresponding one in the United States—and expects on the strength of the foregoing or any other figures, to buy the food he is accustomed to eat at the price he is accustomed to give, he will meet with a great disappointment. He will get some things cheaper, to wit fruit and poultry (which he never buys at home); and some things at about the same price, or a little less, to wit milk, eggs and bacon; but bread, meat, vegetables and sugar will cost him quite half as much again. This estimate is based on prices ascertained on the spot and confirmed by English workmen resident in America from their experience of both countries. The apparent discrepancy between it and the conclusion suggested by the table given above is explained by several circumstances. My prices were obtained in 1903, when several articles, and meat in particular, were considerably higher in America than in 1901. All the people I asked complained of the high prices, which they attributed to "the trusts," but whether that was the true cause or not I am unable to say. On the other hand I found the English prices lower than those published by the Board of Trade, which do not adequately represent the cheaper grades of food. To comprehend the subject it is necessary to understand the

[1] The cost of food in protected countries as compared with Great Britain has been a prominent subject of dispute in the "fiscal controversy" and has undergone the usual fate of all subjects which get dragged into politics; the truth is the last thing either side wants to know unless it confirms their prejudices, which is seldom altogether the case.

question of quality. There are in England two distinct grades, both of meat and bread; there is (1) English meat, and (2) foreign meat; there is (1) best bread, and (2) bread. In regard to meat, of course different parts of an animal fetch different prices, but, part for part, foreign meat is always less than English meat. The following prices, supplied to me by the joint deliberations of a number of workmen and their wives in the Midlands illustrate the distinction:—

	1 lb.
English meat	4d. to 7½d.
Foreign meat:—	
Beef	2½d. to 5½d.
Mutton	3½d. to 6d.
Steak	7d.

The top price given here is not high enough; English steak, corresponding to the "foreign" at 7d., should be 10½d. or even 11d., but no doubt meat of this quality was not bought by those workmen. Nor is it bought in America; it is not to be had there at all. The meat in America is of the same quality as "foreign" meat in England; it is fairly good meat, but not equal to the home-grown. The difference is greater with mutton than with beef; American mutton is very inferior, and not so good as the foreign (New Zealand) mutton sold in England. The best English mutton is a thing apart, not to be obtained anywhere else. The lowest prices named by the workmen are much below those of the Board of Trade, but I have repeatedly seen meat sold at these prices on Saturday night, though I can quite understand that individuals, asked to fill up schedules, might not be purchasers of it or might not like to say so even if they were. What I actually found was that meat which is 4d. or 5d. in England is 6d., 7d. or 8d. in corresponding towns in America; meat which is 7d. or

8d. in England is 10d. or 11d. in America; meat which is 10d. or 11d. in England is not to be had at all in America.

With regard to bread the case is somewhat similar. "Bread" is made from foreign flour alone; "best bread" contains some English wheat. It is more expensive because English flour contains more moisture by nature and consequently takes up less in the process of baking, so that a given quantity produces fewer loaves. The foreign flour is chiefly American; it is esteemed by millers and bakers for the opposite reason. It has more "strength," as they say; that is to say, it is drier, takes up more moisture and makes more loaves. But it is comparatively tasteless and becomes dry very soon by rapid loss of the moisture taken up in baking. English flour has more flavour and bread baked with it keeps moist longer. Thus that which is called "best bread" in England and costs 6d. the 4 lb. loaf is not to be had at all in America; American bread is of the same quality as the cheaper grade in England. It was priced at 4d. the 4 lb. loaf by the same workmen in the Midlands; but 4½d. as given in my comparative table is, perhaps, more common. The price of bread varies greatly in England at different times and in different localities. The cheaper quality is sometimes as low as 3½d. the 4 lb. loaf while "best bread" may be 7d. In the United States it remains with astonishing uniformity at 5 cents. the lb. or 10d. the 4 lb. loaf. When bread is baked at home the cost is much less, but something must be allowed for fuel, yeast and labour. The price of flour is but little higher in America than in England; it is usually a fraction over 1d. a lb. in both countries, but in England the fraction is much less than a farthing, generally $\frac{1}{7}$ of a penny (14 lb. for 1s. 4d.), in America it is between ¼d. and ½d.; 2d. is quite

an exceptional price in either country and only paid for special brands.[1]

The case with regard to Germany is somewhat similar. German beef is very fair and as good as the American, but not equal to English; the mutton is very poor; pork and veal are much the same in all countries. As for prices, I estimate them to be somewhat higher than in America for corresponding qualities. Wheat flour is also dearer in Germany, but rye bread and flour are cheaper. This is commonly called "black" bread and the expression is erroneously used as a term of contempt. Rye bread is excellent and particularly appetising; it is commonly served in first-class German hotels with white bread, as "brown" bread is sometimes served in England as a delicacy. For my own part I prefer the rye bread on account of its flavour and always ate it for breakfast in hotels.

I have said that vegetables are dearer in America than in England. Potatoes are the most important, but it is not easy to make an exact comparison as they vary so much and are sold in so many different ways by measure and by weight; the price in America ranges from 3s. to 10s. a bushel; in England potatoes are more often sold by weight, but where measures are used the price is from 4s. to 4s. 8d. a bushel. English workmen in America informed me that potatoes and other vegetables were dearer where they lived than at home; cabbages, they said, were 1s. and carrots 1d. each. I have not been able to ascertain the retail prices of vegetables in Germany. Fruit is mostly cheaper in America, but not always; in my by no means very well appointed

[1] I speak with some confidence on the subject of bread, having taken an interest in it for years, and having made some experimental investigations with the help of millers, bakers and wheat-growers. The sweetest and most nourishing white bread contains not less than one-third of English flour.

hotel in Philadelphia the price of an orange was 10d. If hotel prices counted, however, the cost of food would be at least double in America.

Sugar is not so cheap now in England as it was in 1901, and the advantage shown in the table above must be discounted.

Fish is an important article of diet among the working classes in England; of the kinds chiefly eaten by them plaice, herrings, mackerel, sprats, ling and others are not known in America, where cod, haddock and halibut are the staple, but as a rule dearer than in England. Whitefish and other native varieties are much eaten in some parts of America, but they are not cheap. Fresh fish does not appear to come within the range of the working-classes in Germany.

My general conclusion is that food is on the whole considerably cheaper in industrial England than in industrial America or Germany, and probably somewhat cheaper in America than in Germany. The markets and the co-operative stores in England are a very important element in the provision of cheap food. They are more general than elsewhere; indeed they are almost universal and form one of the most striking features of English urban life. In Germany the markets are almost always held in the open air only and they do not play the same part in the life of the people as the covered markets in England. Co-operative retail stores are fairly common, but they are on nothing like the same scale as in England, and especially in the manufacturing towns. The English retail societies numbered 1,469 in 1904, with a membership of 2,078,178, and their sales amounted to about £59,311,934; in Germany the co-operative movement has developed more in the direction of agricultural and credit societies, and the retail stores,

though an appreciable factor, are comparatively unimportant. In America co-operation has hitherto been a failure, and it counts for nothing; a good many of the great towns have markets, but many have not, including Chicago and such typical manufacturing towns as Fall River, Lowell, Lawrence, Lynn, New Bedford and Providence. In towns of this class markets are exceptional.

Expenditure on Food.—A great many statistical investigations have been carried out in recent years by means of "household budgets," or schedules, stating the detailed yearly or weekly expenditure on various articles by individual families. No doubt they throw light on the subject and have a certain value, but unless they are on a large scale they may be very misleading. I have had some drawn up for myself by working men, but I am not satisfied of their validity and shall not use them. The same objection applies to other previously published statistics on a small scale. Latterly, however, more adequate *data* have been provided by official inquiries. The most extensive are those of the United States Labour Department,[1] to which I have already made several references. They cover a large number of families in all parts of the States, and though I confess to some lack of confidence in the value of minute details, I have no doubt that the broad results are as trustworthy as it is possible for such statistics to be. An official inquiry by the British Board of Trade on a considerable though not so large a scale, the results of which were published in the Fiscal Blue-book of 1904, enables us to make an interesting comparison with regard to the expenditure on food in the two countries. The British inquiry covers 1,944 working-class families in various parts of the United Kingdom; the American returns, which furnish the best

[1] *Eighteenth Annual Report of the Commissioner of Labour*, 1903.

material for comparison, are those contained in Table V. of the Report, and they relate to the income and expenditure of 11,156 "normal families". In both sets of returns the families are classified according to income, and the classes, though not quite parallel, are sufficiently so for the purposes of a broad comparison. The English returns give the weekly income and expenditure on food in shillings and pence; the United States returns give the annual income and expenditure in dollars. I have, therefore, converted the former from weekly into annual values and expressed them in dollars, thus:—

ANNUAL EXPENDITURE ON FOOD IN THE UNITED STATES AND THE UNITED KINGDOM.

United States.		United Kingdom.	
Income.	Expenditure on Food.	Income.	Expenditure on Food.
$	$	$	$
200 or under 300	147	Under 325	187
300 or under 400	186	325 and under 390	232
400 or under 500	218	390 and under 455	270
500 or under 600	249	455 and under 520	289
600 or under 700	265	520 and above (mean 676)	385
700 or under 800	287	...	...

The United States incomes in these returns go much higher, up to $1,200 or over, and the expenditure in the highest class is $383. I have given above those which are most nearly parallel with the classified incomes of the English returns.

It appears from these statistics that the amount spent on food by working-class families having about the same income is from 16 to 45 per cent. more in the United Kingdom than in the United States, but as the amount of food

varies with the size of the families, there may be an error here. For an exact comparison the families should be classified also by size. That is done very completely in the American returns, but less so in the British ones, which only give the average number of children to each family as classified by income. However, we can get at it very nearly with a little trouble. The average number of children in the whole of the British families is 3·6; we will compare them with those American families of the same income having 4 children, thus:—

Annual Expenditure on Food.

Class according to Income.	American Families having 4 Children.	British Families having 3·6 Children.
	$	$
Class I. . . .	209	187
„ II. . . .	216	232
„ III. . . .	243	270
„ IV. . . .	276	289
„ V. . . .	298	385

Here the expenditure is seen to be less in British families of the first or lowest class of incomes; but the average number of children in the British families of this class is only 3·1, whereas in the American families the number is 4, so that this class does not afford a fair comparison. If we take American families with 3 children, then the figures for this class are—American, 148; British, 187. On the other hand, in the fifth class the British families average 4·4 children and are not fairly comparable with American families having only 4 children. We will, therefore, take the American families with 5 children, and then the figures for the fifth class are—American, 315; British, 385. To make all this quite clear we will tabulate the amended figures:—

ANNUAL EXPENDITURE ON FOOD.

Class according to Income.	American Families.		British Families.	
	Number of Children.	Expenditure in Dollars.	Number of Children.	Expenditure in Dollars.
Class I. . .	3	148	3·1	187
,, II. . .	4	216	3·3	232
,, III. . .	4	243	3·2	270
,, IV. . .	4	276	3·4	289
,, V. . .	5	315	4·4	385

The mean expenditure for all the families is—American, $266; British, $292.

I had no idea what the result would be when I began to work out these figures, but it does not surprise me after my studies from the life, although it contradicts two industriously circulated legends—one that the working-class families are much better fed in the United States, the other that a large proportion of the population in this country is underfed, hungry or starving. All the evidence of every kind that I have gathered emphatically negatives the latter assumption, and my conclusion is corroborated by others.[1] Indeed, if the contention were true, the people must have died of starvation like flies twenty years ago. Between 1880 and 1900 the comparative level of industrial wages rose from 81 to 100, while the cost of food fell from 142 to 100.[2] It is, however, unnecessary to labour the point; the

[1] "From my own experience I cannot bring myself to believe that there are many (boys) who for any length of time suffer the pangs of active hunger" (*Studies of Boy Life in our Cities*, edited by E. J. Urwick). Mr. Rowntree estimated that 9·91 per cent., or less than one-tenth, of the population of York was living on incomes insufficient to feed them adequately; but even this moderate estimate is open to dispute. The dietetic calculations on which he relied are no longer accepted as valid (they never possessed more than a tentative value), and York does not represent our industrial population.

[2] Memoranda, etc., by the Board of Trade (Fiscal Blue-books).

statement is only made to further political or some other interested ends.

I am not in possession of such returns for Germany as would permit of a satisfactory comparison, but something can be gathered from the statistics of 908 families in Berlin published by the Imperial Statistical Office.[1] The families are classified according to the number of persons, not of children. We must, therefore, assume the existence of two parents, and then the German family of 5 persons will be equal to the British and American ones with 3 children. As the British families average 3·6 children each or 5·6 persons altogether, we will take for comparison the German families of 6 persons and the American ones with 4 children. The incomes of the German families of 6 persons range from $250 to $750, so that they are fairly comparable with the British ones as a whole, and with the American ones from $200 to $800. The average expenditure of a family on food works out thus in dollars:—

German.	American.	British.
254	261	292

It should be clearly understood that I am comparing families of the same size and income, as nearly as possible; and the conclusion is that within these limits the expenditure on food is a little higher in the American than in the German families, and considerably higher in the British than in the American families. A larger proportion of the income is spent on food in the British families; the mean percentage is 61·09, while that of all the American families is only 43·13, but for American families of like size and income, namely, with 4 children, and up to $800 of income, it is 50·94; in the whole of the German families it is 49·7.

[1] *Reichs-Arbeitsblatt*, March, 1905.

It does not follow, however, that families occupying the same social or industrial position have this relative expenditure in the three countries. The American schedules include families with larger incomes than any in the British and German lists, and in them the expenditure on food is higher. With families of 4 children and incomes of $1,200 or more the expenditure goes up to $430. Also a larger proportion of the American families belong to the higher classes in the scale. It may, therefore, happen that an American family, the head of which is a workman of a given grade, may spend more on food than a British family of the same size and the same grade, because its income is larger. We have no means of comparing the *status* of the families included in the schedules; but, assuming that they fairly correspond, we find that 9,062 out of the total 11,156 American families fall within the $800 limit. The inference is that the average expenditure on food in 9 out of 11 working-class families in America is less than that of similar families in Great Britain. If, however, the whole of the American families be included in the comparison, then the average expenditure for those of the same size, namely with 3·6 children, is slightly higher in the United States than in the United Kingdom—namely, 299 against 292 dollars.

There can be little doubt, since the expenditure on food rises regularly with the income, that the larger relative amount spent by British families is due to the fact that a larger proportion of the income is released for this purpose by the greater cheapness of other things. The most important item next to food is rent, which has been already dealt with, and shown to be much less. Unfortunately the Board of Trade statistics used above take no account of anything but food, and the same comparison cannot be

extended to other items of expenditure. The United States statistics give the proportion paid for rent both in relation to income and expenditure for the 11,156 "normal" families. The average is 17·12 per cent. of income and 18·12 per cent. of expenditure. Mr. Rowntree estimated rent in York at 14·88 per cent. of the income of working-class families, but made no attempt to estimate its relation to expenditure.[1] An inquiry in Dresden placed the average at 21 per cent. of the income. The Berlin inquiry used above puts rent, fuel and light together and places them at 20·3 per cent. of the total expenditure. If they are put together for the United States they represent 23·81 per cent. of the total expenditure.

It is, I think, quite impossible to compare the relative cost of fuel and lighting in the three countries because the methods are entirely different. Coal is certainly cheaper in Great Britain, but in the other countries, which are liable to severer cold, stoves are used in which other fuel can be burnt and gives more warmth at less cost than the open fireplace, the most wasteful and ineffectual method of warming. The open fireplace has its merits; it is more cheerful and by maintaining a good current of air—commonly called a draught—it ensures some ventilation and is a powerful sanitary agent. The relative freedom of this country from tuberculosis is, I believe, mainly due to the open fireplace. But I am here speaking of cost and it is undoubtedly extravagant.

Similar difficulties attend the comparison of clothing and taxes. With regard to the former, the percentage of total expenditure made for clothing in the United States statistics is 12·95, in the Berlin ones it is only 8·1. The

[1] *Poverty*, by B. Seebohm Rowntree, p. 165.

standard of quality varies so much and is so difficult to determine that a valid comparison of prices is hardly possible; but my belief is that the difference of expenditure shown by these figures is due more to the comparative cheapness of clothing in Germany than to a superior standard of clothing in America. I have had many good opportunities of observing the clothes worn by both adults and children in all three countries and have paid the closest attention to the point. The impression I have gathered is that the general standard of clothing among the working classes is quite as high in Germany as in America. Both men and women are sometimes more finely dressed in the latter, but the general level in all essential respects is no higher. In particular, I have carefully noted the appearance of large numbers of men and boys out of work and waiting at the labour offices in Berlin and elsewhere; they have all without exception been well clothed, better clothed than the men I saw paraded for a strike procession of cotton operatives at Lowell. In England, and still more in Scotland, rags and dirt are commoner. The difference is most striking in the case of children who are far more often wretchedly clothed than in Germany or America. We all know those children and the chief cause of their condition —parental neglect. Another thing which produces an unfavourable impression in this country is the practice, to which I have already referred, of wearing filthy clothes and affecting a ruffianly appearance, habitually pursued by working-men. It is deceptive; it looks like poverty but is merely custom; they can afford and possess excellent clothes but they will not wear them until the week's work is over. So far as I can learn shoddy and inferior clothing is but little dearer in the United States, but good clothing is very much dearer. A suit of clothes which can be

bought for £2 or £3 in England costs £4 to £6 in America; and similarly with some other articles. An English workman told me his experience with regard to hats. He brought with him to the States a felt hat which he had bought for 7s. 6d. When it got rather shabby he went to buy a new one and asked for a hat of the same quality; the price was 28s. which he could not give. The shopman suggested that he should have the old one cleaned, and when this was done the old seven-and-sixpenny one was even then better than the 28s. one, as the shopman himself pointed out. Boots, on the other hand, are cheap; a good pair can be had for 8s. to 12s.; they are not durable and will not stand heavy wear but otherwise they are of fair quality and good value. Shirts are also cheap, perhaps cheaper than in England. My conclusion is that clothing as a whole is cheapest in Germany and next in England.

Taxes cannot be compared without extreme difficulty, because they are raised in so many different ways; and any attempt to compare them would cost far more time and space than the point is worth for the purposes of this inquiry. As an item of expenditure they are relatively unimportant. The Berlin analysis assigns ·9 per cent. of the total expenditure to "taxes"; the statistics of 2,567 families in the United States, published in the same volume as the statistics used above, place the amount at 2·1 per cent. for those families which paid taxes, but these were only about one-third of the total number. It appears, therefore, that the bulk of the working-classes in the States escape direct taxation, as in England, but no doubt they contribute to local taxation through rent, and, of course, they contribute to the State taxation through the customs; but that takes effect in the cost of living under other heads. In Germany, on the other hand, the working-

classes pay income tax on all incomes exceeding £45 a year, as well as the indirect taxes.

Another burden peculiar to Germany is compulsory insurance, which represents the appreciable proportion of 2·1 per cent. of the total expenditure (Berlin statistics). The working-classes also pay, except the poorest, a small amount for schooling, chiefly for books and evening continuation schools.

Locomotion is an item of varying importance, according to the local conditions. In Berlin, it amounts to 1·9 per cent. of the total expenditure, but it is not separately recognised in the United States returns. It practically means tram fares. These are cheapest for short distances in England, where the unit is 1d. and, less often, ½d.; in Germany the unit is 10 pfennigs, or one-tenth of a shilling, but that sum is good for much greater distances, even up to several miles; in the United States the unit is 2½d., which does not, as a rule, cover longer distances than 1d. in England.

Of the remaining items of expenditure some, such as drink, newspapers, amusements and tobacco, can scarcely be included in the necessary cost of living, though they represent a substantial and sometimes a large proportion of the actual expenditure. Others which are more indispensable, such as furniture, utensils and medicine, vary so greatly with individuals that no general estimate can be formed of their relative cost. Furniture, etc., stands for 1·1 per cent. of the total expenditure in the Berlin statistics and 4·3 in the American ones. This difference is no doubt largely due to the greater number of rooms to a family in the United States; but the things are also dearer. It may be said roundly that nearly everything is much dearer in America than in Europe. There are many little things

which are not mentioned in household budgets but nevertheless enter into daily life, such as hair-cutting, shaving, washing, boot-cleaning and so on ; and all of them cost two, three or four times as much in America. The lowest price at a music-hall or other cheap place of entertainment is 5d., against 2d. in England and 10 pfennigs in Germany ; the entrance fee to a base-ball match is 2s., against 6d. or 1s. to a corresponding entertainment in England ; newspapers are commonly 2½d. or 1½d. against 1d. and ½d. This relatively high cost runs through the ordinary and the extraordinary round of daily life. It has been said that the cheapest way to take a cab in New York is to buy the horse and cab and give them away at the end of the journey ; and that humorous exaggeration has a basis of sober fact.

The general conclusion is that the cost of living, inclusive of rent, is lowest in England and highest in America. The items that go to make up the total are so numerous and the circumstances and customs are so diverse in different countries that it is impossible to state the relation numerically with any exactness ; but the differences are certainly considerable. As between England and America they are probably sufficient to neutralise the difference of wages in the case of skilled workmen living in large industrial centres. Several such workmen in different towns have told me that the higher cost of everything does in fact swallow up the advantage, and I have met with none who stated the contrary. But these were men who could command good wages at home, and I am not able to say that the same proposition would hold good of all workmen and in all places. As between America and Germany it would not hold good, because the difference in wages is greater and in cost of living less.

Physical Condition.

I introduce the subject of the physical condition of the people here because it is generally thought to be dependent on housing and the cost of living, and because I am not going to give much space to it. That is not because I think it unimportant, but rather the contrary. The bedrock foundation of all national strength and efficiency is physical; and the importance of what I call national vitality is not, in my opinion, sufficiently realised. But its adequate treatment would occupy more space than I can afford and would extend beyond the proper scope of these volumes. I have, as a matter of fact, written and rewritten two long chapters on it, but have decided to throw them overboard, and to confine myself to a few observations on the comparative physical characters of the people in the three countries. They are necessarily few because they rest entirely on impressions, as no other *data* are available.

The physical effect of urbanisation has been the subject of much discussion in England and Germany, chiefly in relation to military efficiency. In the former the recruiting returns have raised the question of "physical deterioration" and led to a Government inquiry. It was alleged that in consequence of progressive urbanisation the population is physically deteriorating and unable to furnish recruits of the previous standard. A Committee was appointed to investigate this alleged deterioration and it issued a Report under the date of 20th July, 1904.[1] As everyone who had studied the subject expected, the Committee found that there was no proof of deterioration, as the necessary *data* for making a comparison of the present with the past do not exist. The recruiting returns

[1] Cd. 2175.

prove nothing with regard to the general population, since joining the army is quite voluntary, and a lower standard of physique in those offering themselves might be due to the fact that they belong to a lower class; but the returns in recent years do not, in fact, indicate a lower physique. Having no valid evidence to prove or disprove deterioration the Committee turned its attention to "degeneration" and its causes.

"Degeneration" is a term used in medical literature to signify departure from the normal standard of health and strength. Everyone knows that a certain number of individuals are weakly or afflicted or otherwise physically incapable. That occurs, so far as we know, throughout the living world; it is, indeed, the fact on which the theory of evolution rests. In all civilised countries an enormous number of costly institutions are maintained for the benefit of such degenerates among human beings; their sufferings and needs are always before us and appeals on their behalf are always in our ears. This is nothing new, but the report of the Committee, dealing with the causes or supposed causes of such degeneration, is commonly described as "appalling". The use of this expression indicates a great deal of misapprehension except when it is merely a lever to further some particular project. There is nothing appalling in the report. It does not prove that degeneration is more prevalent than formerly; if so, it would establish deterioration, which the Committee expressly disclaims. It does not even prove that the causes of degeneration are more prevalent. On the contrary, it demonstrates that great improvement has taken place in the most important conditions of life. For the rest it contains a great many opinions and conjectures entitled to more or less respectful consideration concerning influences which bear

upon the physical well-being of the people.[1] They are discussed by the Committee with an ability and judgment which make the report a very interesting document, though the deeper-lying difficulties attending the subject are evaded. The most striking and instructive feature of the inquiry is the large consensus of opinion elicited that the most injurious influences affecting the physical condition of the people arise from the habits of the people themselves. My own comparative studies have led me to the same conclusion.

They are chiefly concerned with England and Germany, for it is impossible to form a distinct impression of the physique of Americans when such a large proportion of those whom you see belong to other nationalities. In the Southern States I saw large numbers of true native Americans. Their physique is very poor and distinctly inferior to that of the coloured population. They are of good stature but weedy, hollow-chested, pallid and unmuscular. Elsewhere it is impossible to say what nationality any individual may belong to, until you ask. On several occasions I picked out a workman of fine physique and inquired; he always turned out to be English or Irish. I am therefore unable to compare the American people in regard to physique with the English and German, but those individuals whose nationality was known to me did not suggest any superiority. The great heat prevailing over the larger part of the States in summer is undoubtedly enervating: every one complains of lassitude and weariness in the hot

[1] For my own part I do not care much for opinions on these matters and have no respect for "authorities"; what we want is facts. I gave my own opinion, such as it is, to the Committee with great reluctance and only on being pressed by the chairman; but I am not at all enamoured of it and am quite ready to change it on the production of better evidence.

weather. And it is hard to believe that the super-heated atmosphere generally maintained indoors throughout the winter and right into the spring is conducive to physical vigour. I notice that prematurely or morbidly blanched hair, which is common among cotton-spinners and others who live in a super-heated atmosphere, is very frequent in the States.

With regard to English and Germans, however, I have formed a very decided impression, to which I attach considerable importance. It is that while England produces individuals of superior physique the general level is distinctly higher in Germany. I speak of the "working-classes" or the mass of the people, not of those in a superior position. I have had the opportunity of closely observing a great many thousands in different localities; I have studied them individually at work and noted them collectively streaming out of the factories and workshops on many occasions. I have not seen the Germans at play, because they do not play, but in England the football field affords an incomparable opportunity for seeing the men, and as the game does not interest me I have often spent the whole time studying the spectators. I do not find, as a matter of actual observation, that our factory population is so physically degraded as is often alleged or assumed. Both in the North and in the Midlands men of splendid physique are to be found in considerable numbers, particularly among those engaged in heavy work at the iron and steel furnaces and rolling mills. This is noticeably the case on the Tyne, where tall, big-boned powerful men are exceptionally numerous. A good many are from Ireland, and in similar works elsewhere—South Wales, for instance—I have found most of the men engaged in heavy work are from the north of England and Ireland. I have seen no men of equal physique in Ger-

many. Neither, on the other hand, have I seen there the opposite type, which we have in England—miserable, undersized, wizened and deformed creatures, bearing all the marks of physical degradation. The general level is higher.

I attribute this difference to four causes: (1) The care of the children. They are not better cared for than the children of good parents in England, but the proportion of neglected children is very much smaller in Germany; neglect is there the exception, in England it is almost the rule. (2) The care of the home and the domestic habits of the women. They keep the home much better and spend the income to greater advantage. Nutrition depends quite as much upon the treatment of food as upon the money spent on it. The waste and misuse which mark the domestic economy of our urban population are almost unknown in Germany. (3) The comparative avoidance of injurious habits, which are the complement of good domestic ones. Women who find their interest and occupation in the home have no need to be always at the music hall and the public-house, sitting up late at night and keeping the children up, and men whose homes are comfortable are content to stay there. (4) The military training which all the lads undergo on reaching the age of 20; the physical benefit they derive is more unequivocal than the mental and it lasts longer; it is one of the most valuable educational influences they possess; I refer to it again in the chapter on education. The effects are to be seen everywhere, and they strike every observer. Note the tramway men in Germany and their military air—smart, clean, stalwart and capable fellows. They wear a uniform, but the men in the factory in plain blouses have the same stamp.

The habits of the people! There lies the real reason why the German working-classes with lower wages, longer

hours and higher cost of living yet maintain a superior standard of physique. And for exactly the same reason the case is reversed in the classes above. Young men and women of the middle classes lead more wholesome lives in England than in Germany; they are more active, more fond of the open air and of physical exertion, and they do not consume enormous quantities of beer. This habit is, I believe, responsible for the excessively large proportion of morbidly fat young men among the German middle classes. They work hard, they get up early in the morning—the business trains commonly run about seven A.M.—and they go on till late in the evening, but their leisure time is chiefly devoted to drinking beer, which is not a healthy habit when carried to excess.

CHAPTER XIII.

SOCIAL CONDITIONS.

UNDER this heading will be included a number of miscellaneous factors, of which the most important are games, theatres and other amusements, betting and gambling, drink, culture (books and newspapers), locomotion and other public conditions.

GAMES.

In the whole course of my inquiry I have met with no single factor which throws so much light on the subject of international distinctions as this. I said in the first chapter that in my opinion the English people still possess as much energy as formerly; but they direct it into different channels and make play their work. That applies to all classes of the community and it is a new thing. The English have always been distinguished as a people for exceptional love of games and sports. Hence the expression "merry England" which seems so curiously inappropriate to our dull skies; but those dull skies are the cause of it. People had to amuse themselves and make merry to escape the climatic depression, and at the same time the climate gave the physical energy which found a congenial outlet in the vigorous sports long peculiar to this land. Hence the evolution of the English games which are marked by being in the open air, more or less rough and violent, and popular in character, in striking distinction to the more elegant and aristocratic diversions preferred in France and to the indoor

games, such as dominoes and cards, commonly played by the people in Continental Europe. But indulgence in those amusements used to be confined to high days and holidays; it was an occasional relaxation between periods of serious labour and was not thought of during the intervals.

In the last half century, however, and principally in the last quarter of a century a great change has taken place; what was an occasional relaxation has become a constant pre-occupation and the chief interest of life to a large proportion of men in all ranks of society. The great national games are football and cricket, but they are flanked by a host of others, including polo, golf, hockey, lawn tennis, croquet, bowls, which are appropriate to various seasons or classes or ages. Thus polo is for wealthy young men, hockey a winter game for the young and active, lawn tennis a summer game for the same, croquet and bowls for older and more sedate persons and there are many others less well known. Some are for one sex only, others for the sexes separate, others again for the sexes together. Golf stands alone in being an all-the-year-round game playable by both sexes, separately or together. The excessively rapid and extensive development of this game, borrowed from Scotland, in the last twenty years is one of the most striking evidences of the present intense devotion to games. Twenty-five years ago there were only two or three golf courses in England; now there are thousands. They have been put down everywhere throughout the length and breadth of the land and all round the sea-coast; no place is too remote, none too urban; London is encircled by a ring of them. This game is not popular; it is only played by the middle and upper classes and by professional players, but it is having a very decided influence upon the people as I shall presently show.

Football and cricket, however, are the staples; they divide the year unequally between them, the former lasting eight months from the beginning of September to the end of April. Football is the more popular of the two; beyond all others it is the game of the people, and its recent evolution is even more remarkable than that of golf, to which it forms the popular counterpart. No doubt the reasons why it has been adopted by the people in preference to any other are its cheapness and its spectacular character. It only requires a grass field and a ball, and a grass field is not dear in winter; the outfit and maintenance required for cricket are far more expensive. And spectacularly football presents some decided advantages; it has more life and movement and the excitement of a match is compressed into an hour and a half instead of being expanded over two or three days.

Football is an old game, probably as old as any; but until the last twenty-five years or so it has been played in a casual way, one village challenging another to an annual match and playing according to local custom without any authoritative rules. The change it has undergone is not merely multiplication, but still more systematisation and commercialisation. This is the common fate of games. They begin as pastimes, played very much as the players choose; then rules are evolved and made more and more stringent and authoritative; the pastime is taken more and more seriously and eventually becomes a business. The evolution of football on these lines seems to have begun with the public schools,[1] whence it spread to the universities and to

[1] For the information of foreign readers I should explain that the term "public schools" in England is applied to the large private schools for boys belonging to the professional, wealthy and aristocratic classes. Eton, Harrow, Winchester and Rugby are the most famous of these institutions.

London and then to the provincial towns, which eventually became its chief strongholds, as increase of leisure and of means brought it within reach of the industrial classes. Clubs sprang up everywhere and multiplied with incredible rapidity. Some twenty years ago when the development was still in a comparatively early stage I counted one Saturday 150 matches, representing 300 clubs, in the neighbourhood of London alone ; and about twelve years ago a newly-elected member of Parliament, whom I knew, said that the subscriptions which he was asked to give to football clubs in his constituency amounted to £1,500 a year. Such clubs play friendly matches every Saturday afternoon for six or eight months in the year, and even the most modest of these competitions are witnessed by several hundred spectators ; the more important ones are witnessed by as many thousands. In all the larger industrial towns in the Midlands and the North games are played every Saturday during the season, at which from 10,000 to 20,000 spectators are present, consisting almost entirely of men and lads out of the factories, works and mines.

With the increase of competition and the development of organisation the pastime became systematised into a business. Local and central associations were formed, which offered honorary prizes to be played for during the winter, the competition being decided at the end of the season by the gradual elimination of beaten clubs. Two main varieties of football are played, having different rules and different methods of play, and each of these has its own associations and series of contests. One remains an amateur game, but the other has adopted a large professional element ; and this is the game particularly affected by the industrial population. Keen competition among the larger and stronger clubs led to the engagement of players

of exceptional ability, at first for small sums to cover the expenses incident to playing in different localities, but afterwards for regular salaries. These men are usually paid £4 a week for their services during the season and about half as much for a retaining fee during the summer. So great is the competition for their services that one club will pay £200 or £300 to another as a forfeit to procure the release from his engagement of a player whom they wish to secure. In 1895 the fees paid to professionals amounted to £3,500, in 1905 to £53,000. Most of the players come from the North and belong to the artisan or labouring class, but the game is too exacting to permit them to do any other work during the season. The matches for the important competitions are played on three days in the week, namely, Saturday, Monday and Wednesday or Thursday; but the men are submitted to a strict regimen the whole time under the supervision of a trainer. In the summer they can pursue some other calling and they generally carry on a business of some kind. This is necessary, as the football life is short and very few men are able to carry it on after thirty. Their salaries and other expenses are paid out of the "gate-money" or entrance fees to matches. In little local matches the entrance fee to the ground may be as low as 3d. or 2d., and in the most important ones it may be as high as 1s.; but as a rule it is 6d. Special seats under cover may cost anything from 1s. up to 5s. or even more. The following figures[1] show the number of spectators and the money taken at four matches played on 4th March, 1905, in the third round of the Football Association Cup, the prize offered by the principal football organisation, and competed for by the best professional teams :—

[1] *The Standard*, 6th March, 1905.

At Bolton .	45,000 spectators	gate	£1,471
At Preston .	12,000 „	„	625
At Everton.	45,000 „	„	1,612
At Aston .	47,000 „	„	1,634
	149,000		£5,342

The excitement at these games is indescribable. The spectators follow every movement with intense interest and an attention that never wavers for a moment, as the players sway swiftly and incessantly hither and thither over the ground. Every stroke is acclaimed with loud cries of approval, encouragement or scorn, which culminate in a roar of delight at some signal success or of rage at an adverse decision by the referee, who sometimes runs no little risk of personal violence at the hands of the excited crowd. On great days special trains are run which bring thousands of visitors to the spot, and notably the factory hands and miners from the Midlands and the North, who sometimes travel hundreds of miles to be present. The culminating matches of the season are the final contest for the cup and the international games played by teams representing England, Scotland, Ireland, and Wales.

Cricket is even more highly organised than football; its evolution is older and it supports a still more purely professional element, because it offers a more prolonged career. Being a less violent game it can be played in perfection to a later period of life, and after the age of match play there remain many years of professional activity in the capacity of umpire and teacher at the public schools, universities and elsewhere. Nothing perhaps indicates in a more striking manner the importance attached to these amusements in England and the serious attention paid to them than the fact that at all public schools (in the sense explained above) professional cricketers are numbered

among the teaching staff at a regular salary, though their names do not appear on the list. Both masters and boys in the mass pay more homage to proficiency in cricket than to any intellectual attainments, and the captain of the school on the cricket field is a greater personage than its captain in the class-room.

I have watched the development of this state of things for a good many years with some personal interest on account of my own experience. When I was at school it was beginning, but even then the supremacy of cricket clashed with other interests and pursuits. My school was at that time extraordinarily good at the game and performed some remarkable feats on the cricket field which heightened the standing enthusiasm. I was fond of games, though never so proficient at them as some other boys, and I attained a moderate but respectable position in the second eleven, with prospects of advancement. I found, however, that one was expected to devote the whole of one's spare time to it; not merely to play on regular occasions but whenever there was half an hour between school and meals to run down to the ground and practise, and that every day. Having some other more serious interests to which I wished to devote a certain amount of spare time I rebelled against this appropriation of the whole of it and in the middle of the season ceased to play altogether, thereby incurring incredible odium. It is impossible for any boy to incur more unpopularity, except for some disgraceful act, than I did for putting my hand to the cricket bat and turning back. There were other boys who never played at all and excited no resentment on that account; their weakness was tolerated and over-looked. But giving the thing up was an unpardonable crime; that was high treason. A boy who could play cricket (though not very

well) and did not devote all his energy to playing it better was a monster and a fool. Public opinion has advanced since then, and such a boy would probably be expelled from any self-respecting school to-day. I was recently reminded of the incident. I took a small boy to a preparatory school and the headmaster in showing me over the place pointed out some spot where the boys practised bowling and dropped some remark to the effect that it was "important" for them to learn to bowl in a certain way. I said nothing but wondered; for this schoolmaster—an old friend for whom I have the greatest respect—is an exceptionally sensible man who makes his boys work and never was himself a great devotee of athletics. Yet so strong and general is the feeling about cricket in higher educational circles that even a man of this kind is swept away unconsciously in the current. I am all for games myself and would let boys and girls play to their heart's content, but to say that it is "important" for boys to learn to bowl in a particular way or even to learn at all seems to me only justifiable on the supposition that they are going to be professional cricketers.

Cricket, however, whatever its position in the world of means and leisure is not the game of the people that football is; nor does it excite the same interest. It is played by gentle and simple in innumerable local clubs, and contests between the counties for the "championship" correspond with the "cup" matches at football described above; but the game has not the same hold on the large urban populations. Important matches are attended by large crowds, but the numbers are not nearly so great as at the corresponding football matches. This minor degree of interest is due to the fact that it is more expensive both in time and money. The time is the weightier factor of the

two, for full match play requires three whole consecutive days. The great mass of the urban population, therefore, can neither play much nor witness more than the tail end of a match on Saturday. Those who attend on other days are essentially loafers. To sit regularly all day watching other people do something, which provides a sufficient and continuous excitement, exactly suits the loafer; it is impossible, if not intolerable, to any one else save on particular occasions.

Golf, as I have already said, is still more confined to the upper classes; in fact, the mass of the people take no interest in it whatever, and that is equally true of polo, lawn-tennis, croquet and many other outdoor games. Nor do they play cards to any extent, but billiards and similar games are one of the chief attractions of working-men's clubs, which are very numerous and will be referred to below.

Allied to games are athletic sports, that is, competitions in running, jumping and so forth, and in rowing, sculling, etc., on the water, held once a year for prizes. Innumerable clubs carry on these meetings all over the country, and they are the occasion of a good deal of betting, not so much as horse-racing, but more than football or cricket. Bicycling is becoming more and more popular among the lower classes with the fall in prices. These are the chief points to be noted about games in England. I shall discuss their bearing presently, after dealing with Germany and America.

In Germany a very different state of things prevails. Games are played by the upper classes, who show a growing taste for them. The national game is *Kegel*, a sort of skittles, but the English games and sports are being adopted. The Germans have long taken to rowing, and have attained considerable proficiency at it; bicycle clubs are very nu-

merous and athletic competitions pretty common. Then there are cricket clubs, I believe, and certainly lawn-tennis and football clubs. But all these things do not concern the people, who do not play the games or go to the matches. I went to see a football match between Düsseldorf and a neighbouring manufacturing town. It took place on Sunday afternoon; the day was fine, and the ground very handy to both towns. A similar match anywhere in manufacturing England would have attracted from 10,000 to 20,000 sons of toil, who would have shouted themselves hoarse from beginning to end. At the German match, not one put in an appearance. When I left the field, towards the close of the game, the spectators, who had slowly increased during the afternoon, numbered exactly 65; they were not working men, and they showed no excitement whatever. I noticed a curious difference in the behaviour of spectators and players. In England, as I have said, the former keep up an almost continual noise, shouting at nearly every kick, and bursting into a roar at frequent intervals throughout the game; the players, on the contrary, maintain an almost unbroken silence. It was just the opposite in Germany; the spectators only raised a feeble sound when a goal was kicked, and for the rest were silent, but the players called out incessantly, directing, exhorting and reproaching each other. They played the Association game, not very well. The spectators, I take it, did not understand the game, and only came out of curiosity. Their lack of interest and the total absence of the working-classes indicate precisely the difference between England and Germany in this matter. In the latter games may be ruled out as a factor in industrial life.

To two things, however, more attention is paid in Germany, and very good things too; they are gymnastics and

swimming. Gymnastics are a national institution, and an element in the national education. So, too, is swimming to a considerable extent; recruits are taught to swim. The public municipal baths in German towns generally contain beautiful swimming baths and are decidedly superior in every respect to those in England or America.

In the United States games occupy a more prominent place in the national life than in Germany but very much less than in England. The national game is baseball, which may be said to do duty for football and cricket combined. Football is played, but only for a month or two in the year, and it does not excite any of the popular interest that makes it the most remarkable feature of modern industrial life in this country. Nor does baseball altogether replace it in this respect. The American game rather takes the place of cricket, which it resembles in many respects. That is to say it attracts great attention and important matches are witnessed by huge crowds of spectators; but they are rather cricket than football crowds. As a rule the working classes have no time to spare either for playing or for watching games, and the entrance fee, which is not less than 2s. for good matches, is too high for most of them. Probably when the Saturday half holiday becomes general they will go more often to matches, as the spirit of sport is hardly less strong than in England. Baseball is organised and professionalised as highly as cricket; leading players enjoy the same sort of reputation as great cricketers here; and the newsboys cry the results of the day's matches in the streets in exactly the same manner. Wherever two or three boys are gathered together in an open space they will be found diligently practising the game and imitating the dexterity of the heroes of the day. There is, therefore, no little resemblance, and it might be supposed by a casual observer

that the American public takes these things very much as the English public does. That, however, would be a mistake. The differences are real and important. There is not nearly so much play in America; the bulk of the male population is not all absorbed in it; business and professional men do not devote their time to it. Young men of the wealthiest classes are very keen about athletic pursuits, particularly at college; they have their competitions, and they play such games as golf and lawn-tennis with ardour. No doubt, also, the vogue of these amusements is increasing; but they are confined to the young and the leisured. Men who have entered on the serious business of life do not think of games, the mass of the people care a little, but not much more about them than they do in Germany, and nobody attaches serious importance to them. In England they are taken very seriously indeed. For instance, in a biographical notice of a man of some position in public life, published not long ago in a grave English journal, it was thought not inappropriate to devote some space to the deceased gentleman's style of playing golf and to the reason why he was less successful in that important avocation than he might have been. This illustrates the attitude, and it is in the attitude that the essential difference lies. The motive in games and other contests in America seems to be rather emulation than sport; the object is more to win and less to have a good game than in England.

Now open-air games and exercises are in themselves wholesome to body and mind; they provide a harmless and beneficial outlet for the physical energy which in the young absolutely requires an outlet, and at the same time they involve a good deal of sound discipline. Its influence is seen in the adoption of metaphors from games. Shirking

or mean conduct is said to be "not playing the game" or "not cricket." They are less wholesome than real work in the open air such as gardening, field work and navvying and to my mind less satisfying; but these are too severe for the quite young and not obtainable in the towns. Games, on the other hand, are superior to gymnastics, not only because they are in the open air, an advantage of incalculable value, but also because they develop the body more freely and naturally, train the senses and the mind to activity and involve co-ordination. They are a valuable factor in the national life—how valuable we should probably realise only if we lost them; and their diffusion among the people is a matter for congratulation not for regret. Even when carried to the point of professionalism they entail no necessary mischief. Many professional cricketers, footballers and golfers enjoy and deserve the personal respect of those who know them. The "flannelled fools at the wickets and the muddied oafs at the goals" might be worse occupied. And they might be in worse company. Drake is said to have composedly finished his game of bowls before taking the Spaniards in hand at the greatest crisis in the history of this country. If, instead of playing a game, he had been busy stringing turgid phrases into jingling rhymes he would have done his work no better and might have done it worse.

But playing is one thing and looking on, which is paying some one else to play, is another, and not by any means so wholesome. It is a form of loafing, and indulgence in it, as practised in England to-day, breeds loafers. Still we must not overrate the harm of looking on, and it is necessary to discriminate. The regular frequenter of the cricket field is essentially a loafer, as I have said; he may have a right to loaf, having done his work in life; but the

cricket crowd is not composed of such. It always contains a lot of men of the sort that live upon their wives and relatives and never do a stroke of work. The cricket field is an irresistible attraction to them and a convenient excuse for doing nothing at all day after day. It provides company and conversation (for the loafer is a great talker) as well as excitement, and combines them with abundant opportunity of relieving the thirst with which he is generally afflicted. I am not speaking of the keen cricketer; he wants to see cricket and could not sit out every match. The loafer does if he can raise the entrance fee, for he is no cricketer, though he knows more about the game than any cricketer that ever lived. I admit that the loafer might be worse occupied and often is; the cricket field is the most harmless place for him, but still it encourages him. The football field is different. The time of year often makes attendance highly uncomfortable, which does not suit the loafer. A good deal of enthusiasm is required to induce any one to stand on the wet grass for an hour and a half on a raw winter's afternoon. I have watched the crowd very carefully and I cannot think that this ninety minutes discomfort once a week does them any harm at all. The young fellows would get more benefit from playing themselves, no doubt, but they cannot all have the opportunity, for football fields are a scarce commodity in large towns. I cannot, therefore, find any grounds for a railing accusation against football as such.

Golf, on the other hand, exercises a peculiar influence. It is breeding a race of loafers all over the country. Walking round the links is easier than work, and every lad tries to get taken on as a caddy wherever the game is played.

The real point, however, about these things in the light of international comparison is that they are taken more seriously

in England than anywhere else; they absorb a much larger proportion of the attention, interest, energy and thought of the population in all classes. It is not that young mechanics and mill hands spend an hour and a half on Saturday watching a football match; it is that they think and talk football all the week. Similarly, but more so, with their employers; it is not that they spend the week end, which means both ends of the week, playing golf or something else, whatever it may be; it is that these things are their real interest and chief pre-occupation in life. Of course I do not assert this of every individual, though it probably applies in some measure to a majority. My point is that the elevation of games to a regular and serious pre-occupation among persons who are not idlers but who earn their living and carry on the business of the country is distinctive of this nation as contrasted with the others, with which I am comparing them. I shall return once more to it in the concluding chapter.

Theatres, etc.

Among the attractions of urban life the theatre takes a prominent place. I have mentioned it in my descriptive chapters and have given the number of theatres carried on in each of the selected towns, for which I could obtain the information: these figures include music halls. The distinction has some importance in Germany, but very little in England or America, where the entertainment at the two places approximates more and more.

If these industrial centres are put together we get the following statistical result:—

Number of Theatres in Proportion to Population.

England	1 to 51,091 inhabitants.
U.S.A.	1 to 52,686 ,,
Germany	1 to 62,766 ,,

In individual towns the proportion may be very much higher. Thus in Oldham there is one theatre to 27,482 inhabitants, and in Fall River one to 26,750; and these are the two most purely industrial towns on the list. But the bare statistical comparison is a little misleading. Many of these theatres or music halls in America are exceedingly small, hardly more than booths or large rooms. If the number of seats were compared I have no doubt that the preponderance in favour of England would be considerably greater than that shown in the table. It would be still more so if a more general comparison were made; for in England every little industrial town of 20,000 or 30,000 inhabitants, such as Bilston in the Black Country or Fenton in the Potteries, has its theatre, which is not the case in any other country. The proportion of actors and actresses to the population gives a better idea of the relative position:—

Proportion of Actors and Actresses to Population over Ten Years of Age.

England (1901)	1 to 2,028
U.S.A. (1900)	1 to 3,931

The German census does not distinguish actors and actresses; they are lumped with musicians and other performers.

The much higher proportion of the population living in towns in England accounts for some part of the great difference here shown, but it does not explain the fact that we maintain nearly twice as many of these professional entertainers in proportion to the population as the United States.

There has been a very large increase of recent years in both countries—in England, 70·6 per cent. between 1891 and 1901, and 173·5 per cent. between 1881 and 1901;

U.S.A., 51·1 per cent. between 1890 and 1900, and 205·4 per cent. between 1880 and 1900.

It appears, therefore, that the most recent increase has been at a higher rate in England than even in America in spite of the more rapid rate of urbanisation, of increase of population and of industrial expansion in the latter country.

The figures given above relate only to actors and actresses, who form a definite heading in the censuses; but there are many other allied classes of entertainers, such as "showmen," "performers," and musicians, whom I have not attempted to compare statistically, because the designations are somewhat vague and may not have quite the same meaning in the different enumerations. It is clear, however, from the census figures that a similar disparity exists in these classes too. In Germany the increase of "actors, musicians, artists," etc., between 1882 and 1895 was 26·6 per cent.

There are other important differences to be noted. The theatre (including the music hall) is a much more popular institution in England than elsewhere, which is no doubt the real meaning of the numerical superiority; it caters for the people, and does so more and more. The common notion that the theatre is a place of entertainment for the wealthy or the socially superior classes does not apply to this country. Here the working-classes freely frequent all kinds of theatres and are the principal support of the majority of them. London, where the number of expensive theatres is very large, probably forms an exception, though even in London the chief increase in recent years has taken place in the outer areas, where the prices charged are much less than in the centre. But in the provincial towns the proportion of theatres to population is actually greater in industrial localities than in residential ones,

where the population consists chiefly of the well-to-do. As instances I would mention Oldham, the Black Country towns and the Potteries. The prices are very low. Take these from one of the Wolverhampton theatres as an example: Centre circle, 1s. 6d.; stalls, 1s.; pit, 6d.; gallery, 4d. In the more ambitious theatres in the largest towns the prices are higher, up to 5s., but that is exceptional. The usual run of prices is from 4d. up to 2s. or 3s. That is at the theatre; at the music hall they are less, being from 2d. to 1s. or 1s. 6d. And night after night the cheaper seats are filled with men and women, boys and girls, of the working-classes. On Saturdays the place is crammed with them from floor to ceiling; and at the music hall all the boys are smoking cigarettes.

Want of employment from bad trade or labour disputes appears to have very little effect on the theatre in these places. I remember on the occasion of a prolonged strike which paralysed the trade of a town of about 60,000 inhabitants, the two theatres it supports never flagged. There were relief funds, appeals for help throughout the country, free distribution of everything to help the starving people, and so on. In the middle of it a musical comedy company paid its third visit with the same piece, and made more money than on either previous occasion. In the winter of 1904-5, when the distress caused by want of employment at West Ham attracted so much attention, the local theatres were filled night after night chiefly by working-class audiences.

In Germany a very different state of things prevails. Excepting in the greatest cities, there is only one theatre proper to each town, and it is run by the municipality. It is hardly frequented at all by the working-classes. They do frequent the smaller music halls, but not in large numbers,

and their patronage is almost confined to Sunday, when at least two performances are always given, in the afternoon and evening; sometimes a third is given at 12 o'clock. The Sunday theatre performances are common to Protestant and Roman Catholic localities alike. Very few women belonging to the working-classes go, and, I think, no children. On the other hand, women of the bourgeois class frequent the superior music halls and the theatres in large numbers. Drink is always, and food generally, served in music halls at tables. Some of the newer halls are magnificent, far more spacious and comfortable than anything of the kind in England or America. For instance, one at Düsseldorf seats 4,000 persons or more, and does it handsomely, with tables, ample elbow-room, wide spaces everywhere for walking and an excellent view of the stage from all parts. The prices are from 6d. to 3s. Places of this character are supported wholly by the bourgeoisie. The smaller halls frequented by working-men are of a very modest character, often no more than a large room, with a small stage, and the prices are correspondingly low, from 10 to 50 pfennigs. Altogether, the theatre plays a very small part in the lives of the German working-classes, though a larger one than games; and in all classes it plays a much smaller part in Germany than in England. Towns of 30,000 to 60,000 inhabitants, which always have one, if not two theatres, in England, have none in Germany.

Custom in America more resembles the English than the German model, save in one respect. I have seen no women at all in music halls and very few boys. The prices are higher; the lowest entrance-fee that I have met with was 5d., and that for small music halls in small places. The theatre closely resembles the English theatre, but it is not patronised to the same extent by the working-classes. In

many trades and places the men have neither leisure nor energy to give to the theatre.

With regard to the performances given, the German municipal theatres stand apart; they have stock companies and very varied repertories, including serious opera of all nationalities, light opera, Shakespeare and other classical dramas, modern dramas, comedies, farces and genuine fairy-tale pantomimes. No piece is played twice running. They maintain a certain standard of art both in the choice and the performance of works. For instance, a new serious play of Hauptmann or Suderman will be mounted as soon as possible at every municipal theatre in the country. When I was engaged in my investigation "Monna Vanna" was being played twice a week or more in every large town I visited, and Madame Maeterlinck herself was touring in most of them. It is a tedious play, and I got tired of it very soon, but it is serious and up-to-date, and as such it was promptly added to every municipal repertory. The classical drama and operas, which are never heard in England—by Mozart, Weber and Schumann, for instance—are not allowed to fall into oblivion. An educational influence is maintained. The performances are generally of fair merit, if seldom very good. I believe these theatres do not pay. A statistician in Cologne, while I was in that neighbourhood, published the result of a calculation into the cost of the theatre there; he found that the municipality made a present of 10½d. on the average to every spectator at each performance.

The English and American theatrical repertories and companies are largely interchangeable and often interchanged. The only point I need mention as relevant to my subject is the melodrama and its gradual disappearance before the so-called musical comedy or comic opera. The melodrama is,

I believe, peculiar to the British dominions and the United States; it used to be the one form of play which the working-classes cared to see, and it exercised a very strong influence over them. The theme is always the same, only the setting varies a little. It is always a tale of good oppressed by evil, but eventually triumphant, flavoured with stock domestic sentiment and artless humour, and worked out in a series of impossible incidents. To subtler minds it is false and ridiculous; but there is nothing false or ridiculous in the emotions which it excites and fosters. They are real, human and wholesome. It is a great school of ethics, broad, simple and intelligible, appealing to profound and primitive elements in human nature. Only the fool, wise in his own conceit, despises a thing which has power to sway multitudes. The melodrama is by no means dead, but it is continually dwindling before the rise of a kind of entertainment still more ridiculous and not at all wholesome. A musical comedy may be bright, witty and inoffensive; it has no ethical significance and is intended to have none, but it may pass an hour in a pleasant and even exhilarating manner, which has some value in a dull life. Unhappily, to produce a thing of this kind requires rare gifts, if not positive genius, and it is much easier to supply an imitation, which makes up for lack of wit or something to appeal to the mind by various devices for appealing to the body. The words are drivel and the music a feeble jingle, which has no more to do with music than the verses have to do with poetry. The substitution of this stuff for melodrama is not a change for the better. It appears to be equally popular in England and America, and if there is any difference at all, it is that the pieces which emanate from America are a shade more dull and silly, with an indefinable touch of grossness.

As for the music-hall stage it is international and very much the same everywhere. In America a continuous performance after the fashion of the pantomime in England seems preferred to the programme of separate turns; but the difference is immaterial. A pleasant feature, which formed part of every programme I saw in America, was some extremely good male part-song singing. Both on the German and the American stage I have seen exhibitions of a coarseness that would, I think, be resented in England; but I am not well acquainted with our music-hall stage and may be mistaken.

The concert hall is allied to the theatre and must be briefly mentioned. Music is very popular in all three countries and plays a considerable part in the life of the people. Neither England nor America can pretend to compete with Germany in the production of good music, but curiously enough they appreciate and understand it quite as well, if not better. The number of persons who really understand music is very small in any country, too small to supply the newspapers with competent critics. In Germany the erroneous notion prevails that the nation is exceptionally musical, and any German feels entitled to attempt to perform any music. The consequence is that you hear the finest music murdered with calm self-satisfaction. Choral music is best performed in England; I have mentioned the choral societies in the manufacturing towns as a striking feature of industrial life.[1] In America cultivated amateurs understand music exceedingly well, and I have just mentioned the very refined part-singing to be heard at music halls, but good voices are too rare to produce good

[1] The superiority of the north-country choirs, which is a commonplace of observation, reflects a general superiority. They sing, as they do everything else, with more vigour.

choral singing; even the boys' voices are so harsh that they cannot be used for church choirs, and the detestable practice, of leaving the musical part of the service to a paid mixed quartette prevails. Until recently orchestral music was much more appreciated in Germany than elsewhere, but of late years it has been largely popularised in England and America. The municipal orchestras in Germany, like the municipal theatres, have a certain educative influence, which cannot be attributed to brass bands playing in the parks. On the whole I should say that there is a great deal more music, public and private, good, bad and indifferent, in England than elsewhere. Instruments in workmen's homes are common, and two servants I recently had, who came out of a poverty stricken household, not only rode the bicycle, but played the mandoline. The most prevalent kind of music, however, is the worst; the more successful music-hall tunes are promptly in the mouths of all the children even in remote villages. This seems to be the chief result of the efforts to teach singing in elementary schools.

Betting and Gambling.

Whatever may be said in favour of games and theatres it is difficult to find much merit in betting and gambling in which England is equally pre-eminent. The spread of betting among the people in recent years is, indeed, even more striking than the growth of games and theatres. A few years ago I made an inquiry into the subject and found that the practice of regularly betting on horse-races was mainly confined to some half-dozen centres, and that elsewhere bookmakers only paid occasional visits when races were held in the neighbourhood. Now the business is carried on everywhere nearly all the year round. It has

pervaded the entire population. I live in a village where there is no one to do business with but farmers, very small tradesmen and labourers; yet it is worth the while of a bookmaker to drive in several days a week from a neighbouring small town. He does business not only with men, but with women and children. And everywhere I go I am told that the same thing is going on. In 1905 there were 134 flat-race meetings representing 279 days' racing, and 170 steeple-chase meetings in addition.

The census does not take account of bookmakers; presumably they put themselves down as "financial agents" or something of that sort; but it is quite certain that they are a very numerous body and that they live well. We maintain, at any rate, several thousands of them in affluence.[1] When I say we I mean the backers of horses in this country. Personally I do not back horses, for it would give me no satisfaction whatever to maintain a bookmaker, which I should inevitably help to do if I betted with him. This is so obvious that it at once gives a clue to the class of persons who do back horses. A few bet for sport; they like horses and "back their fancy" for a wager; in other words they buy excitement. It is not a form of excitement which appeals to me, but I am no bigot on the subject and do not presume to dictate to other people how they should spend their money and what pleasures they should or should not buy. The great mass, however, bet for gain; their object is not to buy anything but to make money, though incidentally some excitement is involved. Most of them have never seen a race or even a race-horse; they know and care nothing about it. But they think they see a way to get something for nothing. It is a base

[1] The National Anti-Gambling League reckons the number at 20,000.

and ignoble aim, and the only thing to be said for their position is that it is more demoralising to succeed than to fail. The one who succeeds is the bookmaker; he must succeed or quit the business. It follows that they are foolish and ignorant persons led by a base motive into losing money which they cannot afford. They are in all classes of life, but the great spread of betting is among persons of small means—artisans, factory hands, labourers, small shop-keepers and clerks.[1] Those in a superior social position gamble in other ways, in which there is more chance of winning, as in the money market, or more pure distraction, as at cards. These things are important, too, especially the latter, which occupies an enormous amount of time and attention among the professional and business classes. Among the lower classes gambling, as distinguished from betting, is carried on chiefly by foreigners and is almost confined to London. For my comparative purposes the great salient fact is the practice of betting among the people in this country.

I am not concerned to dwell on the misery and crime which spring from it, though I am well aware how great they are and am not disposed to minimise them.[2] My particular point, as I have explained above, is the absorption of energy. Whatever interest and attention are left over from games and theatres are devoted to betting, and it has a much more injurious influence upon industrial efficiency

[1] An accountant, writing to *The Daily News* on 8th December, 1903, stated that he had recently had to examine and audit the books of a ready money bookmaker. In the previous October the man had received 815 telegrams investing sums from 5s. to £20 and 18,768 slips dealing with sums from 1s. to £1. One of his agents working Smithfield and Covent Garden Markets took 467 papers in a day.

[2] For details I would refer the reader to *The Bulletin*, published by the National Anti-Gambling League, and to *Betting and Gambling*, edited by B. Seebohm Rowntree (Macmillan).

than they, because the delusive prospect of making money without earning it, which is kept in view by occasional wins, gradually destroys all taste and capacity for work. It springs from a base and debasing motive. And the practice continually increases; all efforts to counteract it are futile. Suppressed in one direction it breaks out in another;[1] its variations and ramifications are infinite; it is carried on in the street, the public-house, the club and the shop. It has extended from men to women and from women to children; from large to small towns and from towns to villages. Women have taken to bookmaking. I have only mentioned horse-racing because that is the main field, but to it athletic sports have been added with the usual corrupting effect, and now football is coming into play. It may seem difficult to "make a book" on the results of a football match, but the ingenuity of the betting ring has been equal to the problem. The idea has been borrowed from a practice invented by an inferior class of newspapers, which offer prizes for forecasts of results of matches. This practice, carried out by means of coupons in a variety of ways, has greatly fostered the passion of gambling among young men and boys. It has been adapted to betting in the following manner: The bookmaker takes a certain number of matches to be played on a given date and offers odds against correct forecasts on an elaborate system of combinations, made up from the three possible results: (1) won by home team, (2) by visiting team, (3) drawn, in so many games. There are also odds against naming the top score or any correct score and so on. It is

[1] Attempts at suppression result, as compulsory interference with popular habits is liable to result, in corruption of the executive. An ex-bookmaker, who plied his trade in a London district informed me that the superintendent of police in that division always let him know when the plain clothes' officers were to be put on to watch him.

much more elaborate than betting on a horse-race and rather resembles the intricacies of roulette.

Cricket, I understand, has not yet been pressed into the service, and that is fortunate for the game, for as soon as any sport becomes the subject of professional wagering corruption follows and the sport—which implies a genuine competition of some kind—disappears.

In Germany there is horse-racing, but it is as yet comparatively trifling and it does not affect the mass of the people. The lottery is the recognised and authorised safety-valve for the gambling passion. All the efforts of reformers have failed to abolish it or even to keep it down, but in Prussia at least some success has been attained in so arranging it that it shall be as little seductive as possible to the poorer classes. The system is that of the "class lottery," in which the number of chances is too small and the price too high (£7 4s. to £12 10s.) to permit of any general participation by the lower sections of the population. The traffic in small fractional chances, which used to be carried on by speculators, the enticing advertisements and other means of exciting the gambling instinct have been prohibited. In effect the whole thing has been brought down to a State tax on a middle-class luxury. Other States are less austere than Prussia, and their lotteries consequently have a wide circulation beyond their own borders. But the system is the same in its main features, and I think it may be concluded that, though lotteries have much increased in recent years, they touch the labouring-classes but little. Sometimes a number of men club together and buy a tenth, but the drain on their pockets is small. Compared with betting in England the lottery is a trifling factor in industrial life.

In America there is a great deal of betting and gam-

bling. The most gambling card games are American, and one of them has the characteristic peculiarity that success depends on the skill of a player in imposing on his opponent or "bluffing" him. Among business men, however, the passion takes effect chiefly in business, and the line which divides it from enterprise is sometimes ill to define. With regard to the working-classes I have taken the opinion of English workmen in several centres and they all expressed the same opinion that though there is some betting it is not carried on to anything like the same extent as in England. It is certainly much less obtrusive, but it appears to be increasing and to be sufficiently developed to have attracted public attention. Some attempt has been made to limit the telegraphic traffic.

Drink.

Drink has a more important bearing on the general well-being of a community than on industrial efficiency. That is to say, a man cannot be a hard drinker without seriously affecting his home, but he may still be an excellent workman; indeed some of the most skilful workmen are notoriously among the hardest drinkers. *Cæteris paribus* they would doubtless be still better workmen if they were steady, but the *cætera* are very seldom *paria*. When English mechanics were more skilful than they are now, according to the testimony of manufacturers, managers and old workmen,[1] they also drank a great deal harder. They were not good workmen because they drank, but because they were apprenticed to the trade and took a pride in the work, having nothing else to take an interest in; and drink did not prevent them from being good workmen. I therefore do not consider that this factor possesses so much

[1] See Vol. I., p. 148.

industrial importance as the three previous ones discussed in the present chapter, though its social importance is equally great and its physical importance much greater. It is also of less comparative value, because there is less difference between the three countries in regard to drink.

All three are drinking countries. I have a quantity of material for making a statistical comparison in three directions: (1) consumption of drink; (2) number of public-houses; (3) amount of public drunkenness; but all these *data* are open to certain objections. Their correct interpretation requires a great deal of qualifying knowledge, and I cannot spare the space to discuss them thoroughly. I will, therefore, confine myself to some summary observations based partly on statistics and partly on study from the life, with such details as seem desirable to illustrate them.

I put aside the consumption of drink per head of population because nothing is more misleading in making international comparisons, though it is valuable in comparing different periods in the same country. Suffice it to say that in all three countries much strong drink is consumed.

The number of public-houses to population is greatest in Germany, and regulation by law or authority is least severe. The numbers are given for my selected towns in the descriptive chapters in Vol. I. In working-class quarters bars are often very thick on the ground, and in the principal streets the same may be said of restaurants and cafés. They are licensed by the local authority, which has power to refuse applications, but rarely does so to persons of respectable character. There are no statutory hours of closing, and the law distinguishes between public-houses and superior establishments, where liquor is sold. The former generally close at 10 or 11 P.M., whereas superior

places are often open till 2 or 3 A.M., and some cafés never close at all.

I attribute this comparatively easy-going state of things to the fact that national intemperance has not hitherto engaged public attention to the same extent as in England and America, although "alcoholismus" is now taking its place among the innumerable other ismuses as a subject for learned pamphleteers.

In America licensed houses are generally less numerous in proportion to population than in Germany or England, but there are exceptions. Regulation by law is also more strict, though this varies greatly in different States. The number of licensed houses, however, bears no necessary relation, as it does in Germany and England, to the number of places where liquor is sold; and in this as in other matters the law bears no necessary relation to the practice. Evasion of the law and illicit traffic have been described by so many writers,[1] that no evidence is needed to prove their prevalence; but a little experience of my own may be interesting. It was in Columbia, the capital of South Carolina, where the law is of a restrictive but not severely repressive character. No public-houses, inns, or restaurants are licensed for alcoholic liquor, which can only be sold in special shops. This method has been commended as one of the most successful experiments in the States, and I believe it is so. It was a Sunday and having had nothing to drink but very bad coffee for several days I asked for some wine at the hotel, which was the best establishment in the town and carefully conducted. They could give me nothing as the liquor shops are closed on Sunday. "But," said the

[1] A comprehensive examination of the law and practice in several States is contained in the *Temperance Problem*, by J. Rowntree and A. Sherwell.

manager, "there are plenty of 'blind tigers' down the street." "What is that?" said I. He explained that it meant a restaurant where liquor was illicitly sold and said I should find one a few yards down the street. I did. There I ordered a meal and asked for something to drink; they offered me beer or spirits. I chose beer, and they began to lay the meal in the back part of the premises. There were too many flies there for me, and I asked them to put me near the door. "Well," said the man, "you won't mind drinking the beer out of a cup will you?" "Not in the least, you can bring it in a tea-pot if you like." That is just what he did, and I sat right in the window and had my meal. At the further end of the premises was a regular bar. There were several similar places in the same street. Next day I called on the Secretary of State at the Capitol and spoke of the blind tigers among other things. He assumed an air of ingenuous surprise and was gently suggesting that I must be mistaken, as they had no such thing in the town, when a gentleman sitting at another table in the same room broke in with "Why, the place bristles with them". The Secretary was fairly caught and we all burst out laughing.

Besides blind tigers there are "speak-easies," "kettle-rushing," and other mysterious euphemisms for illicit traffic, which appears to prevail even in towns of moderate size under even moderately restrictive laws. The population of Columbia is only 21,000 and, as I have said, the laws in that State are among the less severe.

England comes between Germany and the United States in regard to the number of licensed houses, the severity and the observance of the law. There has been a great diminution in the proportion of public-houses to population since 1869 and at the same time restrictive legislation has been

strengthened. But a set off in the form of clubs must be taken into account; and I will take this opportunity to say what I have to say about clubs.

Working-men's clubs have increased very rapidly in recent years and they now form an important factor in the life of the people. They are places of amusement and recreation and constitute one more item of differentiation in that category between the working-classes of England and those of other countries. Clubs and social societies are very numerous both in Germany and in America. I took the following figures from the Chemnitz directory:—

More or less social	97
Dramatic	11
Kegel	28
Smoking	7
Rifle	9
Total	152

There were 14 cycle clubs, 6 riding, 9 gymnastic, 2 swimming, 4 athletic, 1 fencing, 1 hunting, 1 lawn-tennis. The club is, therefore, a well-developed institution in Germany; so also in America, particularly in the form of those societies with romantic names which I have already mentioned. In the town of Lowell, for instance, there are 53 societies of one kind or another. But the social club of the English type is almost confined to the wealthier classes. Working-men's clubs, like those which are so numerous in England, are few in America and fewer still in Germany. A great many of them are nominally political, but their utility is almost wholly social. The members play billiards or cards, read the newspapers, smoke and drink. They are alternatives to the public-house, and have had so much to do with drunkenness that some check has recently been imposed by law; they must all be registered and are under

police surveillance to a certain extent; but the law is quite inadequate. If clubs are added to public-houses the urban facilities for drinking in England exceed those of Germany.

This brings me to the question of drunkenness. There is a great deal in all three countries. I have given the police figures for the English and American towns on my list; in Prussia drunkenness does not appear as a separate heading in the returns; it is included under "disorderly conduct". But even if parallel statistics were available it would be misleading to contrast them as they stand, as in the case of consumption per head. I beg, however, to call the reader's attention to the very high figures in American towns because we are constantly having held up to us American sobriety as an example. Taken by themselves and without any comparison the returns conclusively prove the existence of an enormous amount of public drunkenness.[1] The belief in American sobriety appears to be due to a superficial observation of the habits of well-to-do society at table, where iced water is the staple drink and intoxicants are exceptional. The taste for iced water, by-the-by, which is the subject of some ridicule in Europe, is easily understood and rapidly acquired in the States; in a short time it becomes a craving. I have felt it myself so strongly that I have gone to the tap in the cars, although I have seen the lumps of ice put in by attendants with filthy hands. But the custom at meals is deceptive, as anyone may convince himself who takes the trouble to visit the bar before and after or at any time between meals. The most noticeable point about drinking in America is the consumption of spirits, particularly whisky, and of various noxious compounds between meals. Of course the foreign, and

[1] Those who wish for more comprehensive details are referred to the "Statistics of Cities," *Bulletin of the Labour Department*, No. 42.

especially the British, element must not be forgotten. It is undoubtedly responsible for a large share of the public drunkenness, particularly among women. I have some full details for the town of Fall River where the foreign element is exceptionally large. The total number of arrests (1901) was 2,250 or 20·9 per 1000 of the population, a higher proportion than in the most drunken town in England (Newcastle); 1,846 were males, and 404 females; 62·18 per cent. were of foreign birth and they came in this order: English 435, Irish 429, Canadians 350; the other nationalities were insignificant. There were, however, 851 natives, of whom 134 were women, and no single foreign nationality contributed so many women, though the English came close with 106 and the British together (excluding Canadian), far exceeded them. Now the foreign element is 47 per cent. of the whole population, and therefore its share of drunkenness much exceeds its proper numerical proportion, but if the differences in age—constitution and social circumstances be taken into account, the foreign element being mainly factory hands and young to middle-aged adults, the discrepancy must be largely discounted; and it appears that the natives are not much less drunken, class for class, than the foreign immigrants. They are, however, much less drunken than the British immigrants taken alone. But the fact that 134 native women in a population of 54,000 (native) were arrested for drunkenness is to be noted.

I believe the facts here presented concerning the two nationalities under the same law and police procedure in this typical industrial town, represent pretty fairly their relative position in regard to drunkenness; it agrees with what English workmen in the States tell me. There is a great deal of drunkenness there, but not so much as at home, and the industrial classes do not spend anything

like so large a proportion of their income on drink as ours.

That is still more true of Germany, though they are troubled with many habitual inebriates in Prussia and North Germany generally; their appearance is unmistakable, and, as luck would have it, I saw a good many of them. I had not been in Crefeld more than ten minutes when I saw three men come staggering down the main street. I turned to watch what the policeman standing at the crossing, to whom I had been talking, would do. When they got there he was carefully looking in another direction. Thus is human nature ever the same, even in a Prussian policeman. It was Monday and the forenoon: "blue Monday" is a recognised institution in Prussia. The drunkards are drinkers of schnapps, which is plain, rectified spirit identical with Swedish bränvin and what is called whisky in English public-houses. At Solingen I had a similar experience, and at Aachen the first man I spoke to outside the station was a chronic drunkard reeking of schnapps. At Düsseldorf I frequently went into the old quarter of the town, which was near my hotel, and seldom without seeing one or two men intoxicated. But too much stress must not be laid on such chance encounters. These towns contain many Poles who have migrated in search of work. The Slavs are spirit drinkers, and the men I saw might have been of this race; they generally had a dilapidated appearance which I have never seen among regular German workmen, who manage to maintain a remarkably high standard in this respect, even when in misfortune. It is probable that higher wages and increased prosperity in recent years have been accompanied by increased expenditure on drink; but the broad conclusion I draw from such evidence as I have been able to gather is that this

item is not as yet a heavy charge on the pockets of the industrial class at large. In Saxony the great bulk of the men are certainly frugal and abstemious, judged by the English standard. The women do not frequent public-houses, and do not take drink even when offered them; it is considered bad form. This fact has much influence on the habits of the men. I am satisfied that, as a body German workmen drink very much less than our own; the married men cannot afford it, and so set the younger ones a better example.

The case is otherwise with the middle classes, which in Germany consume astonishing quantities of beer and wine. According to the official returns the consumption per head of beer is a few gallons more in England than in the German Empire—about 30 to 27—though the figure for Bavaria alone rises to about 50; but there is a great difference in the manner of it. In England the consumers of beer are the working-classes, in Germany the middle classes; I do not mean exclusively, of course, but mainly. The custom of sitting for hours in the Bier-halle, which is all-prevalent among the German middle classes, and shared by the ladies and often the children of the family, is unknown in corresponding sections of society in England. It is responsible for a great consumption of beer, but this drinking rarely proceeds as far as intoxication. Whether it is very healthy is another question, and I have already hinted at its effects in producing excessive fat in young men. I found to my surprise that England has recently acquired a reputation in Germany to which it is hardly entitled, whether for good or ill. We are all supposed to be teetotallers, and gentlemen whom I met were surprised when I joined them in a glass of wine or beer. I imagine that this notion must have arisen from the efforts of some

ardent propagandists who hold up the example of England to their countrymen very much as the example of America is held up to us. It is about equally true that the English drink no beer and the Americans nothing but iced water.

With regard to drinking in England I have indicated the comparative position and need say little more about this well-worn theme. The only point of interest that I have encountered in my investigation is the evidence that, however great the disorder and misery now caused by drink, it is far less than it was fifty or sixty years ago. I have elsewhere proved that drunkenness has greatly diminished,[1] and that fact is now generally accepted, but I met with a good deal of interesting personal testimony to the same effect. All the old men whom I asked in the industrial centres told much the same story. One manufacturer in a Midland town, whose recollection covered sixty years, gave me a most vivid description of what used to take place when he was a boy. He said that the factories never opened on Monday at all, and very few men turned up on Tuesday; it was not till Thursday that they were in full swing. In order to make up for time thus lost and to earn the money they required, the men used to work all through Friday night and Saturday, and there was the greatest difficulty in getting them to quit work and be paid off by midnight on Saturday. On Sunday morning, when he used to go to church as a schoolboy, the men were lying about the streets drunk to insensibility. The masters and the men used often to drink together. His account of Sunday morning exactly agrees with the evidence given before the Select Committee in 1834 upon the state of things in London.[2] He said: "People talk about

[1] *Drink, Temperance and Legislation* (Longmans, 1902).

[2] See *Drink, Temperance and Legislation*, p. 37.

drunkenness now, but there is no comparison at all; it is ridiculous". Nor did I meet with any other opinion; all the employers, managers and workmen whose recollections went back for forty or fifty years, said that the men are far more regular now, but that nevertheless they are not such good mechanics as they were.

Culture.

Public Libraries are widely diffused in all three countries, but the use made of them differs considerably. A notion prevails in England that we are very much behindhand in the provision of facilities for free reading, but it is not borne out by investigation. This appears to be one of the many subjects in which the national habit of self-depreciation is encouraged by the practice of travellers in extolling something they have seen abroad in some particular place without inquiring whether it is exceptional or not, and in contrasting it with the conditions at home without ascertaining what those conditions are. No doubt that sort of comparison has a stimulating influence, but it may fall very wide of the truth.

In comparing by personal investigation a series of towns as nearly alike as possible, I have found that the facilities in England are on the whole decidedly superior, and such comprehensive statistics as I have been able to obtain do not contradict that particular experience. Free libraries are quite as general in our industrial towns as in those of America, and if some contain fewer books and have fewer readers in proportion to population, others have more. None of our provincial towns equals Boston with its 812,000 volumes to about half a million inhabitants, but neither does any industrial town in America equal Bolton with its 120,000 volumes and half-million circulation to a

population of 170,000. Sheffield, though somewhat larger, is fairly comparable with Pittsburg in size and character; the number of volumes (1901) is very much the same, namely, Sheffield, 130,000; Pittsburg, 140,000; but in the number used Pittsburg has a great superiority—Sheffield, 540,000; Pittsburg, 950,000. On the other hand, if we compare Bradford with Newark, N.J., which has, as nearly as possible, the same population, we get the following:—

Town.	No. of Volumes.	No. Issued.
Bradford	115,000	661,074
Newark, N.J.	79,000	314,874

Some comparative figures for other great towns are given below, showing a marked superiority for England. If, however, a large number of towns be taken, the circulation in proportion to population is perhaps greater on the whole in America; but in order to estimate the value of these statistics it would be necessary to know not only the classes of books issued but also the classes of readers. On the first point there is some information, on the second very little. Fiction forms by far the largest section of the issues in both countries, but whereas it represents about 50 per cent. or a little more in the English libraries (including the issues of the reference department), in America the proportion is over 77 per cent. in the only cases for which I could secure the information. The intellectual influence of novels is a question on which opinion differs, but here again closer discrimination is necessary; there is fiction and fiction, and to form a judgment one ought to know what authors are most read. Broadly, however, I suppose it may be said that for grown men whose minds are formed and who are brought constantly in touch with the realities of life, fiction is a harmless and refreshing relaxation, but for the young, especially girls, and for women absorption

in novels is like a diet of sweets; it enervates and upsets the digestive apparatus and destroys the appetite for strengthening food. Unlimited indulgence has a most pernicious influence, and it is precisely this which swells the returns of circulation. There is the less need for providing facilities for a gratuitous debauch because nearly all the best fiction can now be bought everywhere for a few pence the volume, which all those who want to read at all can afford. And buying entails certain advantages; it restricts the number and enforces selection; and books bought are valued, read and re-read, as books worth anything at all ought to be.

With regard to the readers, some interesting figures are published for the Bolton library, which issues the most complete report that I have met with. In 1901-2 the number of volumes used in the reference department was 24,160, and the classes of readers were as follows:—

	Number of Volumes.
Pupils and teachers	8,670
Artisans, etc.	7,479
Cotton operatives, bleachers, etc.	4,284
Clergy, etc.	2,702
Clerks, etc.	681
Shop assistants	156
Warehousemen	121
Shopkeepers	67

I have no corresponding figures for any American library, but will give some presently for Germany.

Now in this list the working-classes make a very good showing, and when the kinds of literature are also analysed by classes of readers, they come out even better. The two principal headings are "novels and romances" (presumably of the better kind) and "general literature" (not including poetry or travels), and almost the whole strength of the "pupils and teachers" is expended on these two. But the

"artisans" have a different record; they head the list of readers in "sciences and the arts" with 878, in biography with 212, in history with 244, in philosophy with 29, in "poetry and the drama" with 115, in "voyages and travels" with 84; and they are only second to the "clergy, etc." in "law, politics and commerce" (384) and "theology" (83). The clerks are also serious readers with a good record in "law, politics and commerce," "sciences and the arts" and history. The cotton operatives, on the other hand, devote but little attention to the heavy subjects, and are almost equally divided, like the pupils and teachers, between novels and general literature. In both these classes there is no doubt a large feminine element, in contradistinction to the artisans, clerks and clergy; the last use the library almost exclusively for serious literature.

The most marked points of distinction between the English and American public libraries is the much more frequent provision of branch libraries and of newspaper-rooms in the former. Juvenile departments form a feature of both. In some newspaper-rooms in England it has been found necessary to black out the betting news.

Turning now to Germany, we find considerable differences. Municipal libraries are less numerous, generally smaller and much less used than in England or in America, but they exist in most of the larger industrial towns. The following details of some selected cases may be of interest to librarians and others. Düsseldorf has three municipal libraries and one reading-room. In 1901-2 the three libraries contained 9,840 volumes, and lent out 86,291 to 5,671 readers. Of the total number of readers, 1,975, or considerably more than one-third, were labourers, factory hands and artisans, and 1,935, or another third, were women. Of the lendings, 80 per cent. were of "schöne

Literatur" which includes poetry, essays and fiction. The reading-room was used by 33,080 persons, of whom 30,787 were males—an average of 98 per diem. This reading-room is provided with six daily papers, a new and unusual departure. As a rule, German free libraries do not keep newspapers, which perhaps accounts for the very large number of journals published in these towns. Aachen has one municipal library and a reading-room. The number of volumes in the library is about 90,000, and in 1900-1 6,795 were lent to 4,317 readers, of whom the immense majority belonged to the cultivated classes. Only 62 workmen are put down on the list of readers; the rest were professional men, teachers, students, merchants and so on. The reading-room was used on 271 days by 4,307 persons, or 16 persons a day; they consulted about 6,500 volumes. Chemnitz has one municipal library and a reading-room. The number of volumes in the library is about 32,000, and in 1901 7,517 were borrowed by 857 readers, consisting almost entirely of professional men, students and teachers. The reading-room was used by 5,482 persons. Crefeld has one municipal library and reading-room; but apparently books are not lent out at all. The annual report makes no mention of them. The reading-room was in 1901 used by 5,315 persons, among whom were 715 artisans and superior factory workmen; the rest were chiefly students, teachers and merchants. Barmen has one municipal library and reading-room with about 17,000 volumes, of which 7,718 were lent out, while about 4,000 persons used the reading-room.

These figures will seem very small after those given above for English and American towns; but it is to be observed that, in addition to the regular municipal libraries, many German towns have also *Volks-bibliotheken* or people's libraries, in-

tended more particularly for the working-classes. Some of these are maintained by the municipality, others by church societies, others by library or benevolent associations and by various means, including State assistance in some instances. They correspond to the English and American free libraries more nearly than do the municipal libraries proper, which are generally intended for learned purposes only. Hamburg, for instance, has a magnificent town library, which contains over 600,000 volumes, and runs Boston pretty close, but it only issued 9,600 volumes in 1900. An institution such as this corresponds rather with the Bodleian at Oxford than with the public libraries we have been discussing.

Of *Volks-bibliotheken* Berlin has 27 ; Dresden, 14 ; Leipzig, 13 ; Bremen, 15 ; Hanover, 13, and so on. Two of the Düsseldorf libraries mentioned above are of this character. But even with these the number of volumes issued is comparatively small, as the following comparison will show (see page 295).

London and New York are omitted because they can only be compared with each other and no comprehensive figures for London are available. Some of the German returns are undoubtedly incomplete, and the statistics must be taken as a whole with a liberal margin for differences in the method of compilation. Still, they are not uninstructive as they stand. They effectually dispose of the supposed inferiority of England in regard to facilities and the use made of them. Manchester is easily first of all these great towns. The circulation of its public libraries is almost equal to that of Chicago with thrice the population ; and the six English towns together are far ahead of the six American ones.

It must not be inferred, however, that culture by read-

ing is less diffused among the German people. I believe the contrary to be the case. The fact that the circulation of public libraries is smaller in Germany than in England or America is due to several causes; one is that the reading

Circulation of Public Libraries.

Town.	Population.	No. of Volumes Issued.
Germany (1901).		
Berlin	1,913,528	727,295
Hamburg	715,093	87,909
Munich	510,044	198,616
Leipzig	462,675	44,061
Breslau	427,833	300,524
Dresden	404,773	191,067
England (1901).		
Liverpool	684,958	2,052,896 (1903)
Manchester	543,872	2,295,293
Birmingham	522,204	1,332,315
Leeds	428,968	988,710
Sheffield	380,793	540,000
Bradford	279,767	661,074
U.S.A. (1902).		
Chicago	1,800,000	2,372,741
Philadelphia	1,335,000	1,915,687 [1]
St. Louis	598,000	987,264
Boston	573,579	1,890,106
Baltimore	518,000	755,774
Cleveland	390,000	809,515 [1]

is more generally of a serious character; another is that the working-classes are better supplied with books in other ways; they have more at home and works or factories more often have libraries attached to them. A notable

[1] Number used in reading-rooms not given.

case is Krupp's at Essen, and with a few details about it I must close this subject. The library was only opened in 1899, but by March, 1902, it already contained 29,000 volumes and the total lendings for the previous twelve months amounted to 208,793. The classification of books borrowed shows that 52·9 per cent. belonged to the "schöne Literatur," 27·5 to books for children, 2·5 to geography and travels, 2·44 to history, 2·03 to trade and industry; the sections least in demand were law and politics, literary criticism, philosophy and biography. The ten most popular authors among readers of the working-class came in the following order: Schiller, Lessing, Kleist, Hans Hoffmann, Gotthelf, Dickens, E. T. A. Hoffmann, Scott, Goethe and Anzengruber, surely a very creditable list. Translations from the classics were in steady demand. The number of readers was about one-third of those employed at the works —79 per cent. were workmen and 21 per cent. officials. The library is administered with extreme care and much ingenuity in practical details. The system is well worth the attention of public librarians.

The list of the most popular authors just given shows that "schöne Literatur," by no means corresponds with the current fiction, which accounts for the great bulk of the books issued by the English and American free libraries. Schiller and Lessing are a little above Miss A. and Mr. B., with all due deference to the commanding genius of those popular writers; and the facts disclosed support the suggestion that one reason for the comparative smallness of the German free libraries is that they are more select. That, I consider, is to their advantage. The public library, as a storehouse of knowledge and culture, maintained for and by the people, is a fine, self-helpful and elevating influence; as a millionaire-made machine for glorifying the millionaire

and providing the wives and daughters of artisans and shopkeepers with novels which they can afford to buy and are better without, it is a mischievous sham and a public curse.

Newspapers are a very important factor in the life of the people, but they need not detain us long. The most marked difference between the three countries is the very much larger number of papers published in German and American towns than in English ones. I have given the numbers for my selected towns among the statistics, and a single comparison which is fairly representative must here suffice :

Town.	Population.	Daily and Weekly Newspapers.
Sheffield	382,334	12
Essen	183,500	22
Pittsburg	333,500	59

The large number in American towns is to some extent due to the foreign nationalities, which have papers of their own wherever they are numerous; eight of the papers in Pittsburg are German, and out of three daily papers in Fall River two are French for the Canadians there. A condition affecting both America and Germany, though in different degrees, as compared with England, is the greater distance between towns, which tends to produce more local journals. London dominates England far more than New York and Berlin do or can their respective countries; and similarly with the large provincial towns and their own districts. Then newspaper reading-rooms are far more general in England, which probably tends to diminish private customers and so to discourage enterprise. I do not know that multiplicity of newspapers is a very desirable thing; a great many of them merely exist to push some narrow interest or dubious propaganda.

With regard to quality that is to some extent a matter of taste and not to be decided dogmatically; one likes what one is accustomed to and it is not easy to be impartial. As purveyors of news, however, the best English papers are not equalled by any that I have seen elsewhere. For comprehensiveness and accuracy *The Times* stands quite alone by universal consent, and it is most nearly approached by two or three other English papers, though some deterioration seems to be taking place in the endeavour to increase circulation. German newspapers have vastly improved within my own recollection, and the best of them are now very well served with news. They are also strong in thoughtful and learned comment. The provincial papers, headed by the *Kölnische Zeitung* and the *Frankfurter Zeitung*, are particularly good; the *Kölnische* is undoubtedly the most influential provincial paper in the world; none is so widely and so often quoted. American newspapers are more insular in regard to news; their home news is very full but the "foreign intelligence" is scrappy and meagre. So far as I know, no American paper even attempts to cover the whole ground, and the greater part of such foreign news as is given comes second-hand *viâ* London. On the other hand, I have often been struck by the great ability and knowledge shown in the comment on affairs not only in leading journals but in many provincial ones.

The press has great responsibility; it is the keeper of the national conscience, the final court of appeal, the last bulwark of justice, honesty and liberty. In this regard the weakest points in all three countries arise from national conditions. In Germany it is subservience to government control or influence; in England and America it is subservience to political party or to commercial ends. All

three poison the springs of truth, but the last is worst because it is final; the ultimate arbiters are the public, for a newspaper must have readers or perish; and if they accept or demand the false, the unworthy or the base, they are certain to get it. Official lies do not long deceive and party politics are counterpoised by other party politics; but fabricated news, sensational or nasty details, vulgar personalities and other base devices for attracting readers not only pander to a vicious public taste; they create and develop it. The United States still leads in this kind of journalism though England is now paying the sincere flattery of imitation and Germany is not guiltless. For sheer display of what is gross and vile the Berlin comic papers defy competition.

Newspapers, like nearly everything else, are cheapest in England; the number of half-penny ones is now very large and constantly increasing. The newspapers of the people are the half-penny evening journals which are published everywhere and are the only daily papers published in many towns. They depend for their circulation on sport; they contain "all the winners" (of horse-races), the "latest cricket" and the "football results". The only other papers largely read by the working-classes in England are the penny weekly journals, which are read at home on Sunday. They are chiefly devoted to crimes or sensational trials, particularly divorce cases, and to the doings of royalty, which are the only standing subjects, except sport, that interest the English working-classes. The American cheap Sunday papers appeal to the same class by the same means, and they are more sensational. They publish coloured cartoons or illustrations, and I understand that this is the origin of the term "yellow journalism". One of these papers distinguished by its recklessly sensational

style, published a startling picture or series of pictures in bright yellow, and hence the term. I fail to see any elements of national strength in the multiplication and diffusion of cheap newspapers of this class. German papers are relatively dear; that is to say they give very little for the money, and the paper is bad.

On a general review I must put the English papers first. They are as fearless and independent as the American, and they guide rather than follow public opinion. The best of them have a dignity, gravity and weight only equalled by the high courts of justice; they share with that great and stainless institution the chief honour of maintaining a high moral and intellectual standard.

Locomotion.

For intra-urban locomotion electric tramway traction has now become general, except in the streets of inner London. A few years ago English towns were very far behind both American and German ones, partly in consequence of the adherence by the Local Government Board to obsolete regulations; but they have recently made up lost ground very rapidly, and though statistics show a great superiority in the United States[1] I find as a matter of actual experience very little to choose between the three countries in respect to the facilities provided in large urban centres, always excepting London; and even the outskirts of London are now fairly provided in some directions.

The differences in price I have already noted in Chapter XII. on the cost of living. Another prevailing though not universal difference is the preference in England for double-decked cars over single ones with covered standing platforms

[1] Statistical comparisons will be found in the Twelfth Census U.S.A. "Special Report on Street and Electric Railways," pp. 149, 152.

at both ends, which are general in Germany and America. In my opinion the latter are greatly superior, and I am at a loss to understand the choice of the cumbrous, unsafe, less frequent, less speedy and less convenient double cars in England. On the other hand the tracks are usually better laid in England. That observation does not apply so much to the lines in important thoroughfares in the centre of towns as to those in outlying parts. In England tracks are usually laid in the same manner throughout, whereas in Germany and America cheapness is secured at the cost of quality outside the central areas. That is particularly noticeable in Germany, where the tracks are often terribly rough. In America, as a rule, a very heavy rail is used in the large towns—from 70 lbs. to 135 lbs. a yard—and when well bedded it gives a very firm track, but that is only done where the traffic is heavy; elsewhere the bedding is very poor and sometimes excessively light rails—as low as 15 lb. to the yard—are used. In England a moderately heavy rail is used, but it is uniformly well bedded, which makes the lines expensive to lay.

The overhead wire system is by far the most general everywhere; it obtains in 97·2 per cent. of the electric tracks in America. In Germany it is not infrequently combined with a conduit system wherever the latter is more convenient at particular points; but instead of a trolley a broad wire loop is carried at right angles to the conducting wire and brushing its under surface. This obviates the inconvenience caused by the wheel slipping off the wire.

Speed is generally greater in Germany than in England and considerably greater in America than in Germany. Speed is, indeed, the most salient point of difference. I have never found a car going at all fast in England, and about London they are abnormally slow, like everything

else in the most backward of all large towns. But speed in America is bought at the cost of accidents. In 1902 the number of persons killed was 1,218 and injured 47,429. Two-thirds of those killed (831) were run over; the number of passengers affected was—killed 265, injured 26,690. Speed in the streets accounts for the persons run over; bad tracks and other standing defects for the passengers injured.

Electric tramways are usually owned and worked by municipalities in England, always by companies in America, and by both in Germany. Municipal ownership with the working leased to a company is common in Germany and seems to be the most satisfactory method.

The provision of electric tramways has made a vast difference to the industrial classes in getting to and from work; it enables them to live on the outskirts of towns where housing is cheaper and less congested. The result is a general centrifugal movement which to a large and growing extent counteracts urbanisation by suburbanisation. The ever-increasing proportion of the population living nominally in towns does not really live under urban conditions but in a sort of half-and-half state. In England bicycles are now much used by working-men, where there are no trams or trains.

Intra-urban methods of locomotion other than electric tramways — overhead and underground railways, motor omnibuses—are developing, but only in a few particular localities, and they are as yet relatively unimportant.

The great numerical preponderance in proportion to population of tramway traffic in America, which is shown by the statistics referred to above, is due less to superior facilities than to reluctance to walking and to an enormous use of the cars on Sundays. What do you do on Sunday?

I asked everywhere; and the answer always was, "Mostly ride on the cars". They do not stream about the streets on foot in throngs as in England and they do not go to the music hall or dancing saloon as in Germany.

Inter-urban electric traffic is far more developed in America, particularly in the New England and the Central States, the former for short distances, the latter for long ones. Indianopolis is a great centre; it is possible to travel from there by this means for more than 300 miles right into Western Virginia and for 100 miles or so in many directions. Detroit is another great centre for long-distance tramways. There is nothing like this extension in England or Germany, but in both countries towns and villages lying near together are linked up by networks of tramways. That is the case, for instance, in Yorkshire, Lancashire and the Midlands; and similarly about Düsseldorf, Dresden and Chemnitz. In England, however, we have not got fenced electric tracks, as in America and Germany.

The railway development is superior in England, and this tends to discourage other methods of traction, of which New York State is an illustration. The inter-urban tramways are much less developed there than in other States, having fewer railways in the North and West. On the whole railway travelling is far the best in England. This is the only country in which services are provided at once cheap, comfortable, fast and frequent. There is very cheap travel in Germany, and it is safe and punctual; but the cheap travelling is very uncomfortable, slow and infrequent. In America there is rapid and comfortable travelling, but it is dear and infrequent; the ordinary trains are slow, and in winter all are intolerably overheated. The larger carriages used in Germany and America are more convenient, but in the cheap classes they are very

uncomfortable, and the jolting is much greater by reason of inferior tracks. The tests I use are reading and the behaviour of glasses and bottles on the table. On the best lines in America and Germany I have never been able to put a glass on the table, pour into it and let it stand, as one can on all the six or seven large lines in England which provide meals on board. Writers who pick out a single point, such as cheap fares in Germany or "drawing-room cars" in America, merely mislead. The other day I travelled from London to Sheffield; the distance is 165½ miles, and it was smoothly run with absolute punctuality in 3 hours and 20 minutes for 157 pence. The train was a corridor with entirely comfortable cushioned seats and ample room; they served a dinner consisting of soup, salmon steaks, roast lamb and green peas, stewed fruits and jelly, cheese, butter and lettuce for 2s. 6d.; and every single dish was first-rate. The soup was so hot we had to wait for it to cool; the salmon was as firm and dry as if it had just come out of the water; the peas might have been picked an hour before. If we had paid 10s. at the Carlton the food could have been no better. That was on the Great Central Railway, which is not considered one of the foremost English lines, and the combination of cheapness, speed and comfort could not be equalled in any other country. Nor can the excursion trains which take the working-classes to the seaside in summer for almost nominal fares; no other people enjoy the same privileges.

Other Public Conditions.

I can only summarise some other points affecting corporate life. Municipal administration is very highly organised in Germany, more so in some respects than in England, but it differs in certain important features. It is non-

political and less dependent on elections. The mayoralty is a paid and more or less permanent office, and the town council has a large permanent element. There is consequently less inducement or opportunity to push private interests or theories, and the administration is conducted more generally with a single eye to the public interest. It is on the whole more practical and efficient; it does not embark on large transactions regardless of economy, and is more successful in making its enterprises pay. The functions of the local authority are more varied and important than in England; they include the collection of imperial as well as local taxes, the administration of the poor-law, public hospitals and public education, as well as police, sanitation and so forth. Yet there is little "municipal socialism" as yet, though there seems to be a movement towards it in some localities.

In America municipal enterprise is much less developed and the administration conspicuously inferior. It is idle for American communities to claim a lead in civilisation so long as their rotten municipalities and incapable administrations offer a warning to all the world. As I have said in the first chapter, we have no cause to boast in England on this subject; but we have had a lead in time with regard to certain matters and are still ahead in them. Street paving is one, though to that there are exceptions; sanitation and sewage disposal and markets are others. On the other hand, we are painfully inferior in street lighting, which is, I think, best done in America, though some towns in Germany are at least equal to the best. In public baths Germany is far ahead; the beautifully appointed establishments, even in towns of moderate size, make one ashamed of the dirty little places that do duty for baths in most of our towns. In parks American towns frequently have a larger

area, but ours are more numerous and generally much more attractive by reason of superior verdure. Germany is less well provided.

I might mention many other points, but I think these will suffice. It will be seen that no country is first or last in every feature of municipal life ; but taking one thing with another I find the German standard highest and the American lowest.

CHAPTER XIV.

TRADE UNIONS AND INDUSTRIAL DISPUTES.

Among the many gifts of England to the industrial world none is more prominent than the modern organisation of labour. Regarded calmly and in perspective the gradual building up of the trade unions in the face of every obstacle and without help or encouragement is a most remarkable achievement. It is the complement of that method of production which is commonly called the "factory system". Doubtless combinations among workmen can be traced back to a much earlier period; for the matter of that most institutions can be traced back, in some form, to a time when all records fail, and probably the workmen who built the pyramids had their unions. But the organisation of to-day, with which alone we are concerned, is the product of the factory, though it has since spread to other occupations. The factory made it possible and the conditions of the factory made it necessary. I have insisted before that the factory was, in the main, the creation of the workman. Most of the large concerns of to-day, even in America, were originally started by workmen in a small way, and though the practice of establishing works on a great scale by subscribed capital has since come into play and is growing, I believe it could be demonstrated that even now more manufacturing concerns are started by successful and enterprising workmen than by mere capitalists. That it was so a hundred or fifty or thirty years

ago will not be doubted by anyone who takes the trouble to inquire into the origin of existing works. In the town of Longton, for instance, there are some ninety pottery or china works; every one of them was originally started by a workman, and some so lately that they are still carried on by their workman founders. That trade requires less capital for a start than many others and therefore it offers a more striking illustration, but in earlier days that was the regular course in all of them.

Now, no men are harder taskmasters than such employers. They are themselves hard workers, frugal, saving and self-denying; it is the exercise of those qualities that enables them to become employers. Then they have a hard struggle to succeed, and as they do not spare themselves they are not minded to spare those whom they employ. They have the bent for making money and "getting on," and cling tenaciously to all profits they can scrape together. Consequently they exact as much work and pay as little as possible. It is a delusion to suppose that workmen who "rise" have a fellow-feeling for those they leave behind. If you take any large works, who are the people connected with it that have least sympathy with the workmen? Not the wealthy men at the head of it, not the shareholders, not the educated and well-paid manager or engineer, but the foremen. It is largely the superior power wielded by the foremen and their unsympathetic use of it that keep the workmen apart from their employers and place them at a disadvantage in certain respects in English factories as compared with American ones, notably in the matter of suggestions and new ideas which may be taken up and lead to advancement or reward.

The true origin of the factory has been obscured by

the domination of the words capital and labour, which call up a picture of a set of rich men and a set of poor ones so fixed for all time. At any given moment it holds good in the main, but the assumption that it has always been so and always remains so is quite false. The picture takes no account of the movement which is always going on. There is, in fact, a perpetual flux of the units which compose it, poor becoming rich and rich poor, some rising and others falling in the social scale. And the development of manufacturing industries was chiefly a process of workmen rising to be employers. This fact largely accounts for the excessively hard conditions of factory life, which were imposed by risen workmen upon the rest. The answer of the rest was trade unionism. If they had not the gift or the opportunity to become employers they yet found a way to protect themselves; and with infinite pains they reared the structure of trade organisation over against that of the factory. Both have sprung from the self-helpful workmen of England, the one representing the more gifted few, the other the less gifted but still virile many.

It was a painful process, so painful that nothing but sheer necessity could have forced its accomplishment; painful not only by reason of the obstacles presented by the law, by tradition and by powerful interests, but because of the difficulty of getting men to combine at all. The organisation of labour is a phrase that runs glibly off the tongue, but few who use it realise the enormous efforts and heart-breaking struggles it conceals. The organiser of labour is popularly supposed, even by his own clients, to have a very easy time, drawing a comfortable salary with nothing to do but go about, speechify and get up strikes. There have been and are such organisers, but they do not last long. It is not in that way that trade unionism has been built up. I was

talking not long ago to a veteran, who has spent his life and energy on it; a reticent thoughtful man, not a talker; and he said, "If I had a son who wanted to go in for organising labour I would flog it out of him". The chief trouble arises from within, and that not only from jealousy, intrigue and ingratitude, but from the reluctance to combine, which is due in part to an independent spirit, but more to the dislike of making any immediate sacrifice for the sake of ultimate benefit. The difficulty of getting men to combine is shown by the desperate means to which trade unions have been compelled to resort in order to force compliance, and by the intense animosity displayed against those who refuse. They have been accused of intimidation, violence and tyranny, and their annals confirm the charge; they have been guilty of all those things time and again. Every one who has been at all among workmen has met cases of compulsion and oppression bitterly resented; and in earlier times coercion was employed in a far more savage and violent manner than it is now. The use of such means is commonly denounced, and I am not concerned to defend them; but the dispassionate student may look beyond that aspect of the matter and see in them evidence of the difficulties which trade unionism has had to face and of the resolution which has been required to overcome them. Such resolution could only be aroused and sustained by necessity. The British unions have sailed into calmer waters of late years; but the necessity still remains. The secretary of a large employers' association said to me recently, "There are bad employers, as there are bad workmen, and therefore trade unions are necessary".

I have put down these few reflections on the origin of trade unions because they have a direct bearing on my

subject. I see in this long-drawn, toilsome and successful struggle a signal proof of the energy and endurance of our people, a proof not second to the development of manufactures of which it is the complement.

Both have sprung from the soil and in both England has led the world. But when we look at the present stage of both in their comparative aspects we see a difference. England is far more decisively ahead of other countries in labour organisation than in manufactures, if she is ahead in them at all; and I have no doubt the reason is that the former has had more difficulties to struggle against. It is not ease but difficulty that makes strong. The stage of development reached by trade unions in England and their present bearing on industrial life seem to be very imperfectly realised. Few subjects are habitually regarded in such a violently partisan light; some can see only the merits, others only the defects of the unions; but at home there seems to be a growing inclination to take a calmer and fairer view of them. Abroad, the view is antiquated. The English unions are regarded by foreign manufacturers with satisfaction as a heavy drag on their English competitors, but the satisfaction is tempered by a well-founded fear that their own unions are following the pernicious example. Foreign unions, on the other hand, regard the English ones with envy and credit them with a power which they not only do not possess but show less and less desire to acquire. These observers do not realise the changes which are taking place through the relations between organisations representing employers and employed and the discipline which recognition and responsibility are bringing into the ranks of trade unions.

The chief difference between trade unions in England and those in other countries is that the former have reached

a more advanced stage of development. Elsewhere the English societies are generally regarded as an example to be followed as nearly as varying conditions permit, and a great many unions in foreign countries are actual copies of an English model. In America English trade unionists are numerous, and they are often found conducting the affairs of local unions, many of which have been founded by English workmen, naturally on the lines of those at home. There is therefore a general resemblance but with many differences and modifications.

A detailed comparison is neither possible nor necessary for my purpose. It is not possible because of the great variety of types and the lack of exact information about them. There is no uniformity among trade unions in any country; they have for the most part grown up from small local beginnings and have taken shape accordingly. But certain points of comparison must be noted.

Numbers.—With regard to numerical strength the statistics are everywhere defective and unsatisfactory. Those for England are the best. I am not fond of estimates, which generally mean pitching on some nice round number which suits the predilections of the estimator; but we sometimes have to put up with them. In 1903 the membership of trade unions was returned or estimated at "about" 2,000,000 in Great Britain, 2,000,000 in the United States, and 1,200,000 in Germany. The American estimate, which is taken from Mr. John Mitchell,[1] is based on rather vague *data* and seems very generous, as the unions affiliated to the American Federation of Labour in 1902 showed a membership of barely more than 1,000,000. Considering the doubtful character of these statistics and the difficulty of ascertaining with accuracy the number of persons who

[1] *Organised Labour.* by John Mitchell.

might be members of trade unions I do not think it advisable to attempt any estimate of the relative proportions of organised and unorganised labour in the three countries; but it is clear that the unions embrace a much larger proportion of the population in Great Britain than in Germany or America. That superiority is especially marked in regard to the manufacturing population. I have laid stress on the factory in discussing the rise of the unions, and there is no doubt that the conditions of factory employment led to their formation; but other great industries took them up afterwards. Among them mining holds the first place; followed by building, railways and docks. These, however, concern me less than the manufacturing industries, in which organisation is very much more advanced in England than elsewhere. The unions are not only larger, but they have existed longer, and since the contributions are much higher they are wealthier and more powerful.[1]

Constitution.—With regard to constitution and management no substantial or general differences exist. As I have said, there is no uniformity among unions, but they are all based on a general democratic principle, which takes different forms in different stages of development. The course of development, however, seems to be towards greater uniformity in detail, resulting partly from experience and example, partly from the tendency to amalgamation or federation. This tendency is more marked in England and America than in Germany, where the unions, as I shall presently show, are divided into sections by differences of aim and principle, which have nothing to do with the immediate objects of combination, and are a

[1] In 1902 the income of the 100 principal unions in Great Britain, representing three-fifths of the whole, was £2,067,666 and the reserve fund £4,372,173; the income of the German unions was £893,210, and the reserve £827,390. For the American ones I have no corresponding figures.

source of great weakness. A special tendency towards grandiose combinations is displayed in the United States. The "American Federation of Labour" is the last, and probably the most successful of several attempts to combine all workers into one gigantic organisation. Founded in 1886, it has practically superseded the "Knights of Labour," which preceded it, and it claims superiority over that moribund corporation in being "governed from below," not from above. The majority of the American unions are affiliated to it, though most of the wealthy and powerful "Railway Brotherhoods" are outside. The list for 1903 includes 21,640 affiliated unions of one sort or another. Their relations to it are loose and its functions somewhat vague, but it is an active body, principally engaged in promoting the formation of local unions. It has a fine set of offices at Washington, where I counted thirty-six typewriters all working with characteristic American ardour. This is peculiar; but several English unions are quite as well housed, and the head-quarters of the German Social Democratic unions in Berlin is even more imposing.

Legal Position.—Trade unions are recognised by the law in all three countries, but their legal position differs in some important respects. Nothing, however, is more difficult to define. In England, recent decisions in the High Courts have thrown the subject into such confusion that no one knows where the trade unions stand. The most important of these decisions was the celebrated Taff Vale case, which arose out of a strike on the Taff Vale Railway in 1900, and has excited universal interest throughout the industrial world. The upshot was to decide that trade unions are responsible for wrongful acts done by their agents, and can be sued and cast in damages. This has been a tremendous blow; it is held to have practically

annulled the charter of trade unionism, which is the Act of 1871, and to have crippled the effective power of the unions to the point of helplessness. The argument involves the whole theory and practice of trade unionism, into which it is not my purpose to enter. But the real point is that old difficulty on which I have insisted above, the difficulty of getting men to combine. There seems on the face of it no harm in making trade unions, in common with other bodies, responsible for wrongful actions committed by agents; the remedy is simply not to commit them. But that is where the difficulty lies; what are wrongful actions? Apart from the criminal law, the conduct of industrial disputes and the relations of unionists to non-unionists are governed by the Conspiracy and Protection of Property Act of 1875, which relieves of conspiracy persons combining to do a thing which is lawful for an individual, but forbids violence, intimidation, persistent following, hiding tools, watching and besetting, following in a disorderly manner in public. Persons guilty of these acts are liable to action and damages on the part of persons injured by them, whether in the course of a strike or in general furtherance of unionism, as by blacklisting or putting pressure on employers to discharge or not to employ non-unionists. The interpretation of the law by the Courts practically forbids picketing except for the purpose of obtaining information; but until the Taff Vale case it was thought that trade unions were not liable for such acts. What they fear now is that it will prevent them from effectively carrying on a strike, which is their last resort, because they may be liable to damages for picketing. And picketing is only necessary because men will not combine without pressure. In proportion to their unwillingness is the temptation to carry coercion beyond the limits of the law increased. One result will undoubt-

edly be—or I might say has been—to turn trade union effort more into political channels. That is the natural effect of restriction and it is illustrated by Germany.

The law relating to trade unions is not in such a state of confusion in Germany as it is in England, though it leaves the limits of trade union action uncertain in many respects. Its superior clearness is largely due to the fact that some things, the legality of which is doubtful in England, are expressly forbidden in Germany. In other words, the activity of trade unions is more restricted by law, and this is one of the chief reasons why most of them have assumed a political character, which distinguishes them from those in England and America.

The charter of trade organisation is section 152 of the industrial code, by which the right of combination "for the purpose of obtaining more favourable wage-and-work conditions" is secured to all employers and employed, except servants, agricultural labourers and seamen. The paragraph expressly mentions the cessation of work and dismissal of workers—otherwise strikes and lock-outs—as lawful means to the authorised end. This seems clear enough, and no doubt it effectually legalises the position of ordinary trade combinations and their proceedings. But there are some points to be noted. It has been laid down by the High Court that the section only contemplates combination for the improvement of individual conditions. If the unions go beyond the economic interests of their members and aim at exercising an influence on public affairs or the discussion of political subjects, they come under the law regulating clubs. The section, further, does not legalise any proceedings which are otherwise forbidden. If the means adopted to obtain more favourable conditions are actionable under the ordinary law, then the action lies

against the combination, and the persons acting for it. In fact, the union and those who represent it are responsible for acts committed on its behalf. Orders or incitements to breach of contract, for instance, would render union officials liable to action. This appears to settle those questions of liability which have recently led to so much confusion and uncertainty in the English Courts. Equally clear is the German law with regard to pressure brought to bear on individuals to join in concerted action. Physical compulsion, intimidation, abuse or denunciation for the purpose of inducing others to join or of preventing them from leaving such combinations is punishable by three months' imprisonment, if it does not entail a severer penalty under the criminal law. Denunciation—we have no exact equivalent of the German word—is any expression which is intended to bring a person into ill repute as unworthy of intercourse; it would include such terms as "scab" and "blackleg". Threats of any kind come under this provision, so long as they are intended to limit the free action of the individual. Simple picketing, however, appears to be in a doubtful position. The question came before the High Court in 1900 in regard to some regulations issued by the Senate of Lübeck which prohibited picketing. The Court held that the regulations violated the right of combination guaranteed by section 152 of the industrial code, and were, therefore, invalid, but left the question open whether picketing could be dealt with by the police on other grounds. By an order in council dated 18th January, 1898, it was pronounced punishable as "grober Unfug," disorderly conduct.

Like other laws in the United States, those relating to labour organisations vary in different States. Combinations are everywhere lawful, but certain States have passed

special Acts for the protection of trade unions. For instance, fourteen States have laws prohibiting employers from discharging men because they belong to a union or from compelling them to agree not to join one as a condition of employment; nine States have Acts specially declaring trade combinations lawful; the Federal Government and several States have passed laws providing for the incorporation of unions, and nearly all the States have accorded statutory protection to the trade union label, a device peculiar to America. It was introduced in 1874 by the Cigar-makers' Union, first as a mark of discrimination against Chinese labour, but was presently applied against all unorganised labour and became very popular. It consists of a slip of paper or stamp attached to goods indicating that they are the product of trade union workshops.

As elsewhere, however, the real trouble lies in the relation of organised to unorganised labour and in the legal aspects of methods, direct or indirect, adopted to compel combination, such as boycotting, black-listing, intimidation, threats and so on. Many States have laws prohibiting these things, with varying degrees of stringency, and applying both to employers and employed. But there is the usual uncertainty in the interpretation of the law and in defining the nature of the offence. Actions are frequently brought by men who have been discharged through pressure brought to bear on employers by unions, and with varying results. In June, 1905, the Supreme Court of Massachusetts awarded $1,500 damages to a shoemaker who brought an action against the representative of the Boot and Shoe Workers' Union for obtaining his discharge. In February, 1905, the Supreme Court of Vermont awarded $2,500 against the Machinists' Union for picketing, etc. The Supreme Court of Minnesota recently decided in an

action brought against the Bookbinders' Union that the Union can neither sue nor be sued. The Appellate Division of the Supreme Court of Ohio recently refused an injunction to restrain a company from discharging workmen because of their failure to join a union; but the judge said that on trial the result might be different, and the evidence might justify an injunction "against the picketing in the manner of its doing, against the boycotting in the methods of its practice, and more". These few recent cases sufficiently show that the legal position and liability of trade unions are at least as uncertain in the United States as anywhere else.

Funds and Payments.—I have said that the contributions are on a higher scale in the English than in the German and American unions, but they vary so much that a statistical comparison is hardly possible. In Germany they are very low, running usually from 10pf. to 30pf. a week, or a little more than 5s. to 15s. 7d. a year; but in the Hirsch-Duncker unions (see below) they rise to 30s. a year. In England they range among the 100 chief unions from 7s. to £4 a year, and the average was 36s. 7d. in 1903. Mr. John Mitchell is my authority for saying that the rates are much lower in America. He does not, however, give comparative figures. I find that in the Mule Spinners' Association of Fall River, which is one of the oldest and strongest unions, the rate is £2 12s., which is exactly the same as in the corresponding unions of Bolton and Oldham, namely, 1s. a week; but this comparison cannot be taken as typical.

With regard to payments, some differences are to be noted. Trade unions have generally a double character with two objects, which are distinct, but seldom distinguished in the minds of the members or in the practice of

the society. They are fighting bodies and at the same time benefit societies, and the funds are allocated according as one or other character predominates. In the English unions the fighting character has generally predominated, and the first charge on the funds is "dispute benefit" or "strike pay". Of the 100 principal unions all provide for this charge. Some unions provide for nothing else; but they are generally of a temporary character, more or less instituted for the occasion, and hardly to be called unions. In all cases strike pay takes precedence, and, if necessary, swallows up all the funds in hand. The object of dispute pay is, of course, to maintain a strike or a lock-out; it is essentially a fighting provision—in fact, a war chest. But by a natural transition it has led to a benefit expenditure, which is one of the most prominent features of the English unions, and that is the support of men who are not on strike, but out of work for other reasons. In some unions unemployed benefit is not distinguished from dispute pay, but in many it is a separate item. The amount so expended in times of depression is very large. In 1903 the 100 principal unions spent over £500,000, equivalent to nearly 9s. a member, on unemployed benefit. The engineering and ship-building group headed the list with £224,000, and the textile unions came next with half that amount. The miners, who form numerically the largest group of all, spend comparatively little on this object. In Germany the corresponding expenditure was less than £73,000. The payment of unemployed benefit is confined to the Hirsch-Duncker and some twenty Social Democratic unions (see below). I have no figures for the American unions, but the amount is comparatively small. The Cigar-makers' Union, a strong body with the most extensive benefit system of all the American unions, spent in the

twenty-three years 1879-1900 the total sum of £183,400 on out-of-work pay, exclusive of strikes.

The payment of unemployed benefit has an important influence not only in securing the welfare of members during periods of depression and preserving their self-respect, but in enabling them to maintain the standard of wages. It is one of the points in which the superiority of the English unions is most marked.

Other forms of benefit are of less importance. Next to strike pay funeral benefit is the most general provision, and that in all countries; sickness and accident pay is also very general; superannuation allowance much less so. Some of the American railway unions are distinguished by the very large sums they pay for death benefit, up to £900 (Mitchell). Another point of distinction about American unions is their activity and expenditure on the formation of local branches. That is the chief business of the American Federation of Labour, and Mr. Mitchell states that "nearly all of the national organisations employ paid organisers who are constantly engaged in forming local unions".[1] The United Mines Workers, who form by far the largest group, had in 1902 eighty paid and 200 unpaid organisers devoting their time to the work, and spent £22,000 on it.

Special Features of German Unions.—The political character of the German unions is a point of considerable importance to which reference has already been made. In order to make it clear a somewhat detailed account of these unions is necessary. Other matters of sufficient general interest are involved to warrant the devotion of some space to the subject, which is little understood out of Germany.

There are four different classes of trade unions:—

[1] *Organised Labour*, p. 77.

(1) "free" or Social Democratic Gewerkschaften, (2) "Christian" Gewerkschaften, (3) "German" or Hirsch-Duncker Gewerkvereine, (4) independent Gewerkschaften.

(1) The first or Social Democratic group is by far the largest. The beginnings of these bodies date from about 1865. They originally represented a spontaneous labour movement and were regarded with indifference or hostility by the Social Democrats, who followed the teaching of Marx or Lassalle and saw no hope for labour save in the realisation of a political and economic revolution. In their eyes "self-help" was a delusion, and in so far as it might succeed, or apparently succeed, could be only an obstacle to their programme; but the interest taken by working-men in the movement suggested that it might be utilised as a means of political agitation, and in 1868 some members of the Lassalle party busied themselves in founding unions, which for the most part had a very brief existence. The followers of Marx, notably Liebknecht and Bebel, had somewhat more success in the same direction, until the anti-Socialistic law of 1878 swept over the movement like a hurricane. The strength of the unions during this period is not exactly known, but an investigation in 1877 showed that there were then about thirty organisations with branches in 1,266 places, and some 50,000 members in all. The numbers had been considerably higher some years before, but the Marx party became rather alarmed lest the movement might be too successful in reconciling the work-people with the existing order of things, and consequently discouraged it. The anti-Socialist law dispersed most of the unions for the time being, but the impulse to combine was not to be denied, and organisations quietly reformed under a different name. They were, indeed, rather stimulated by repression, and before the law was repealed in

1890 they had reached a far higher membership than before or for several years later. This goes very strongly to show that trade union organisation is not the creation of Socialism, even in Germany, but of the impelling force of common needs and interests among the workpeople themselves. Failure to perceive this fact leads to a misconception of the labour situation. After 1895 the unions began to increase rapidly, and were particularly stimulated by an agitation against the proposed repressive measure known as the Zuchthaus-gesetz in 1899. In 1903 the number of affiliated organisations was sixty-three with a membership of 887,698, and there were in addition some local unions with 17,577 members. Their income was £751,591. The largest groups are the building trades, metal workers, miners, general labourers and textile trades in numerical order One-third of the expenditure was for strike pay.

These trade unions are commonly called Social Democratic, but their relation to the Social Democratic political party is vague and undefined. They are nominally non-political, or at least they have no avowed connection with a political party, and it must not be assumed that they are thick-and-thin supporters of the Social Democratic programme. The truth seems to be that the two seek to use each other and exercise a mutual influence. The Gewerkschaften form a large organisation, admirably adapted to further a political campaign, and the party in turn is a Parliamentary force which can do a good deal to promote the aims of the unions; but it is to be noted that as the party increases its strength by canvassing the labour vote through the unions, it slowly and reluctantly but steadily and inevitably modifies its programme and its tactics. The working-classes want to "better themselves" by getting an easier life and a larger share of what is going; they do not

want a class war or a revolution, though, of course, there are individuals among them who believe in the whole Socialist theory. The fact that the masses do not is further shown by the development of the anti-Socialist unions, which will be presently described. If this is taken into account, together with the significant modification of the Socialist party's attitude as its success increases at the polls, it is, I venture to think, clear in which direction things are tending. There are many things that labour wants far short of the "nationalisation of all the means of production," and it is going to get them, or some of them, by degrees. With the two most powerful parties in the Reichstag bidding directly for the votes of working-men and supporting trade unionism the issue is certain. Moreover, as they get them the "nationalisation, etc.," and the class war will quietly drop out of sight. Social Democracy will not be the first movement which has died of apparent success.

(2) The "Christian" unions. They are of much more recent date than the first and third groups, and their name needs some explanation. They are called "Christian" to distinguish them from the Social Democratic unions; the word is intended to signify anti-Social Democratic. It is not that they are religious organisations; on the contrary, their aims are purely economic and social; it is rather that the Social Democrats are anti-religious, and the "Christian" unions stand for a protest against that spirit, which has infected the "free" Gewerkschaften along with the Social Democratic politics. The point is of great interest, and, as it appears to be very little understood in England, I will enter into it a little more fully.

The Social Democratic teaching is essentially anti-religious. The spread of atheism used to be set forth openly as one of the cardinal points in the programme.

"We are simply done with God" (Engels); "We open war upon God because He is the greatest evil in the world" (Schall); "It is our duty as Socialists to root out the faith in God with all our zeal, nor is any one worthy of the name who does not devote himself to the spread of atheism" (Liebknecht)—these utterances by former leaders of the party indicate the spirit. Now, Berlin is the head-quarters of Social Democracy and of the Social Democratic unions, and such sentiments have found a good deal of support there; but, as I have already pointed out, Berlin does not represent Germany. It is a great mistake to regard the German people as particularly sceptical. Some classes are, no doubt; but in the mass the people are God-fearing; and even among the highly educated there is less confidence than there was in the sufficiency of science and reason to settle everything. That attitude is antiquated. On various grounds the crude assaults of the Social Democrats upon religion were generally resented, and it is only since such violent utterances as those quoted above have been dropped that the political movement has made rapid way. This is one of the modifications referred to above. It was found politic to adopt a milder tone and to profess indifference about religion, though anti-Christian pamphlets are still issued and sold. The present attitude found amusing expression in the Reichstag in the session of 1903, when the deputy Albrecht, who is a master tailor at Halle, laid down the views of the party in the following terms:—

> We regard religion as a private matter, we deprive no one of his religious convictions; but we tell the working-men to acquire as much knowledge as possible, for the more they know the less they need to believe. Eventually, when they know everything, they need believe nothing.

These remarks, apparently delivered in good faith, naturally caused great amusement. It would be unfair to saddle

the whole party, which contains some highly educated men and embraces fundamental differences of opinion, with the follies of an ignorant member; but his words sufficiently represent the attitude of orthodox Social Democracy towards religion; violent hostility has been modified to contemptuous tolerance, and the cogent reason for the change is that hostility did not pay. The Christian unions are standing witnesses to the fact.

The revolt against the anti-religious spirit within the "free" Gewerkschaften and the foundation of separate unions originated with the miners of the Rhine Westphalian coalfields in the year 1894. They had already for some years had experience in organisation of a different kind in the "Christian Social" societies (Vereine), started in 1869, and attempts were made from time to time to found a trade union, but without lasting success, until the appearance of a Social Democratic federation of miners and ironworkers stimulated an energetic attempt to establish rival organisations and dispersed the fears of the Christian Social leaders, who found themselves compelled in self-defence to accept and assist the strong bent of the workmen towards combination on the lines of the English trade unions. The movement started by the miners was taken up by other trades and spread to various parts of Germany. In 1903 the total membership was returned at 192,617, distributed in thirty-one chief organisations. The railway men are particularly strong in these unions, having, in 1902, 67,674 members in Prussia, Bavaria, Baden and Würtemburg. Of the other trades the original miners' union still remains the strongest, with over 40,000 members in 1903, and the central union of Christian textile workers comes next. The income in 1902 was £53,864. The head quarters and the general secretary's office are at München Gladbach.

The practical objects of the Christian unions are (1) to secure the efficient administration of the existing social laws; (2) to promote their extension and completion; (3) to improve the condition of the working-classes by co-operative self-help. In pursuing these ends they rely upon the principle of combination independently of political parties, but their antagonism to the Social Democrats creates a certain bond between them and the Central party, and they are not free from the entanglement of political patronage. Their only quarrel with the Hirsch-Duncker unions, with which they are otherwise in cordial sympathy is that the latter are too supine in pushing the cause of labour and confine themselves too much to pecuniary benefits. Religious matters form no part of their proceedings, and Catholics and Evangelicals are equally welcome; but they take their stand generally on the Christian religion as a moral and social basis, and are absolutely opposed to Social Democracy. What they look forward to is eventual union with the "free" Gewerkschaften, when the latter have purged themselves from this taint, but at present such a consummation is not in sight. Probably the last elections, with the sweeping success of the Social Democrats, have put it further out of sight than ever for the time being; but it remains to be seen what the party will do for its friends. If it does nothing—and hitherto it has done rather less—a reaction is not unlikely. The trend in all countries is to the formation of a Labour party, and the German workmen, who are strongly resolved to have a larger share in the growing prosperity of the country, may see their advantage in cutting loose from a sterile dogma and returning their own independent candidates. It is surprising that they have so long put up with the lawyers, writers and employers who form the bulk of the Social Democratic party in

the Reichstag. If they do so, or if, on the other hand, the Social Democrats definitely drop their antiquated dogmas and concentrate on practical reforms, there is no reason why all the trade unions should not work together for common ends. Their present distraction is a great source of weakness.

(3) The "German" trade unions, or perhaps it would be more correct to say trade societies (Vereine), were founded in 1868-69 by the efforts of Dr. Hirsch, formerly a progressive member of the Reichstag. They made rapid progress at first, but came to grief over an unsuccessful strike of miners. After the war they began to recover, and steadily, though slowly, increased. In 1901 they counted over 1,800 local unions and 16 national unions, held together by a central federation. The membership in 1903 was 110,215. The strongest sections are the engineers and metal workers, "factory and hand-workers," cabinetmakers and shoemakers. They are professedly founded on the English model, and seek to improve the condition of their members in a practical way by promoting labour legislation and by benefit institutions. The first is the task of the central federation, the second that of the local unions. With regard to legislation, they do not attach themselves to any party or programme, though in mutual sympathy with the free-thinking sections; but they watch the course of politics, press for measures in the interest of labour, and oppose those which threaten it. Thus they energetically fought the proposed Zuchthaus law, and in doing so found themselves marching with the "free" Gewerkschaften; but there is a strong antagonism between them and the Social Democrats, who have been excluded from their ranks since 1876. Every member before admission has to sign a declaration that he is neither a member nor a supporter of the party. They expressly repudiate the class war and the visionary aims of

the Social Democracy; they take what they can get from the Legislature, aim at peaceful relations between labour and capital, while maintaining their own interests, and for the rest rely upon self-help. To this end they pay much attention to benefit funds and particularly to out-of-work support, which is the weakest point of the other unions. The expenditure on this head in the nine years 1892-1900 was £43,306. Members receive from 6s. to 7s. 6d. a week for 13 weeks. The Hirsch-Duncker unions particularly pride themselves on their sound financial position. In 1900 their accumulated reserve, apart from sick and burial funds, was £55,000. Their total funds were £153,542, and their income £31,453. The other trade unions, or rather the Social Democratic writers and speakers, often sneer at this line of action, but it is more practical than their own and more in accord with the example of the English unions, whose strength and influence they acknowledge and envy.

(4) The fourth class is the smallest; it was credited with 68,724 members in 1903. I am not sure whether the Printers' and Typefounders' Union is included in the group or among the Social Democratic Federation; but it really represents the independent type and is the oldest, best-organised and strongest of the German unions.

Printers are a very intelligent and superior class of workmen, and they are particularly so in Germany, where the compositors' craft is brought to a degree of perfection which can hardly be matched by any other trade. They appear to have had some sort of organisation among themselves, as might be expected of exceptionally skilled and educated men, from a remote period, and to have conducted their affairs apart from the political movement with which the later unions have been more or less associated. In short, their aims and methods more nearly resemble those

of the English trade unions. In 1848 they formed a national union, or, as we might say, an amalgamated society, but it did not last long. In 1867 the present national union was formed, and though nominally affiliated to the federation of Social Democratic Gewerkschaften, it stands outside the political movement and is able to protect the interests of the trade without assistance. Thus it has established a machinery for settling disputes and wages by mutual agreement with employers after the English model. The only other organisation which has brought self-help to the same point, so far as I can learn, is that of the cutlery trades at Solingen.

These notes will sufficiently explain the peculiar position of the German unions; it only remains to add that they are all growing, though with the usual fluctuations, and increasing in power, particularly the Social Democratic group. But their divisions and dependence on patronage from above keep them weak.

We are now in a position to consider the comparative influence of trade unions in the three countries. My own conviction is that on the whole they are a source of industrial strength to England at the present time and constitute a decided advantage to her over her competitors. I am well aware that a contrary opinion is widely held in England, and still more widely in other countries. The unions are believed to be a serious handicap, and they have even been charged with causing a "crisis in British industry". But that charge can only be colourably sustained by a grossly partial selection of evidence. British manufacturers, who are not ignorant though often naturally prejudiced, do not generally take that view. Nothing has struck me more in the course of this investigation than the remarkable difference of attitude towards trade unions

displayed, in private, by employers in this country and in the others. I have not heard a single word in favour of trade unions from any employer in Germany or America; the most favourable expression amounted only to indifference on the part of those who do not happen to come in contact with trade unionism. Otherwise the prevailing feeling is strongly hostile; employers hate and dread the unions. In England I have met with no such feeling at all. I have heard the unions unfavourably criticised and sometimes condemned, but without bitterness; I have far more often heard from employers and managers fair and even friendly expressions of opinion. I will give one specimen which has as much value as any expression of opinion can have. It is the utterance of a great captain of industry, an old, wise and experienced man, the active head of one of the largest concerns in the world, and one that comprises many of the branches of industry which have suffered most severely from foreign competition in recent years: "We have certainly been outstripped in some respects," he said, "and the trade unions are partly to blame, but the greater part is the fault of the manufacturer himself; he has been too supine and easy-going. I have always found the trade union leaders very nice to do with, level-headed and reasonable."

This striking utterance, which puts the whole case as between employers and trade unions in a nutshell, was quite spontaneous. The gentleman, on learning that I had paid a visit to the works, desired to see me himself the next time I called, and that is one of many interesting things he said. It is the more valuable because the industries with which he is connected are among those which trade unions have been particularly charged with injuring. I have heard many others to much the same effect; but the general ab-

sence of ill-feeling has made a still greater impression on my mind. It is probable that employers would not express a positive opinion so freely in public as in private; trade union leaders certainly do not, their position is too delicate; but the negative testimony of an absence of ill-feeling is sufficiently eloquent.

The sins charged against trade unions in this country are restriction of output, opposition to machinery, interference with the management, interference with "free" labour and fomenting disputes. Evidence, varying in value, can be adduced in support of all of them; but a just verdict can only be reached by weighing the evidence on both sides of the account.

About some of these charges much misapprehension is current, partly through generalising from a few particulars, partly through confounding the union or its leaders with its members. Every fault is credited to the former, and it is assumed that if there were no union there would be no desire to do the things complained of. The assumption is justified of some things which only come into play with the existence of a union, but in others it is generally the exact opposite of the truth. Restriction of output and opposition to machinery are much older than the unions, and they used to be exercised with far more violence and determination before the unions existed. They are ingrained in the nature of workmen, not only in this but in other countries. Men have risen and smashed machinery in Germany and the United States as well as in England. As organisation has been developed the impulse has been modified not aggravated.

A specific case will illustrate the respective attitude of men and of their union. In the file-cutting trade hand-cutting has within the last few years been replaced by

machinery, which turns out the stuff with great rapidity. In one large shop in Sheffield some of the men objected after trying the new method and went to their union. The secretary came down to the shop to inquire. He found that there was no attempt to cut wages, but on the contrary the men were earning more than before. One of the objectors, who had been making £2 4s. 3d. a week on the average by hand-cutting, was earning £2 17s. 2d. with the machines The secretary declined to interfere and went away remarking that he "wished he had as good a job himself". Nevertheless that man threw up his work and was followed by another who was earning £3 15s. a week (less the boy's wages).[1] They declared that "it was not right to turn the stuff out so fast".

Here is the root objection to machinery. Workmen cannot get out of their heads the idea that there is a certain fixed demand for any commodity, and that if it is produced more rapidly employment must be lessened. They seem unable to understand that demand expands indefinitely with cheapness and that lowering the cost of production increases employment. The trade union leaders, being generally more intelligent, do understand it, and when they say they have no objection to machinery as such it is no more than the truth. But they object to machinery when it is so applied as to lower wages, and they are justified in doing so; they exist for the purpose. Sometimes, no doubt, they are over-suspicious and make needless trouble, but on the whole their influence is moderating. By helping to adjust new conditions, by allaying the suspicions and securing the confidence of the workmen, whose spokesmen they are, they facilitate the adoption

[1] I have examined the books and can vouch for the truth of these facts. I have the names of the men and know the trade union secretary.

of new machinery; sometimes they stimulate the employers and insist on improvements.

Opposition to machinery is one form of restriction of output. Another is due to a far worse cause, which is especially charged against the English unions, and that is sheer laziness. That also emanates from the men, and it is common in trades in which time-work prevails. The building trades have a very bad record; some branches, particularly in the neighbourhood of London, are a disgrace to their country and their class. They include a larger proportion than other skilled trades of lazy, drunken, foul-mouthed blackguards, who take no pride in their work and aim at doing as little as possible. They have made "the British workman" a by-word of contempt and an object of derision. The unions do not exactly enjoin laziness but they too often countenance it. They sometimes enjoin restriction of output in piece-work when diligence is rewarded or they expect it will be rewarded by cutting prices; but that is the fault of grasping employers. I have already discussed the point in the chapter on wages.

In all cases it must be remembered that a great deal depends on the personal influence that happens to be paramount at the time among any group of men and that their conduct is not necessarily dictated by the union to which they belong. In 1902 some pneumatic drilling and caulking tools were introduced into a certain large shipbuilding yard. The men employed in the workshops produced double the quantity they had done before; the men in the yard only produced the same quantity, but they both belonged to the same union.

Interference with the management stands on a different footing. The unions are wholly responsible for it, and there was a time when some very important trades were

seriously threatened and damaged by their action in this direction. A wave of crude Socialism passed over them after the London dock strike of 1889, which brought some Socialists into notoriety and inspired others with ambition. It did not touch those unions where the reins were held by strong and level-headed men, but it had a considerable success, and caused a great deal of trouble for several years. The doctrine that labour has the right to own the means of production was assiduously proclaimed, but as realisation was found to be impracticable the next best thing was attempted and some unions sought to control the means of production in the interests of labour. It was this course of action which made such a profound impression in competing countries, where nothing of the kind has been attempted and Socialism is merely talk and politics. It filled foreign unions with envy and foreign manufacturers with satisfaction, and no doubt if it had gone on they would soon have had the field to themselves, for no business can be successfully conducted in that way. They have not yet realised that it failed and is now virtually dead. With their backs to the wall the employers organised their forces, fought and won.

A form of interference which has often caused trouble arises from jealousy between unions, each seeking to establish a monopoly in a certain class of work. The employer who is quite indifferent what union the men belong to so long as they do the work, is made a party to their quarrels and expected to adjust his business to suit their arrangements. This vexatious action has been most common in the building and engineering trades, in which many analogous processes are combined and their assignment is to a large extent a matter of indifference. It has often led to stoppages and has undoubtedly increased the cost of pro-

duction. It cannot be defended. Men have the right to combine and manage their own affairs, but they have no right to call in other people to make the combination successful or to secure its ends at their own expense.

The most flagrant example is the perennial conflict between the unions and free labour, and here public opinion is always against them because they seek to violate the first principles of liberty. If they cannot get men to join them, that is their own affair; they have no right to use force and still less to ask any one else to do their business for them. The blindness induced by partisanship in this matter is most instructive. The unions and their ardent partisans burn with contempt for those who will not join or who break away from them; it is expressed in such terms as "blacklegs," "scabs" and "rats". Employers and their partisans, on the contrary, see in them fine, honest, independent fellows, who are merely exercising an elementary right to sell their labour as they please. But when a combination of employers is in question the whole picture is turned round. To the unions the employer who does not join or who breaks away is not a blackleg, a scab, or a rat, but a just, honourable, independent man; to the other employers he is a contemptible creature, who deserts his order in the hour of stress to benefit himself. To the looker-on it is six of one and half a dozen of the other. But the violence of organised against free labour has brought its own cure, and has much abated. Free labour has organised too in self-defence, with and without the assistance of employers. The free labour organisations were at first derided by the partisans of trade unionism. Having no knowledge of labour except that which they gained through the spectacles of some trade union leaders, they knew nothing of the deep and real resentment aroused by the in-

tolerance and violence often exercised by trade unions, and did not believe in a genuine desire among working-men to resist them. Since the free labour organisations have continued to exist and flourish,[1] derision is not effective and the cue is to ignore them; but that is no wiser than the refusal of some employers to recognise trade unions. An obstacle does not cease to exist because you look the other way; the only result is that you run into it.

The great complaint, however, against trade unions, and particularly trade union leaders, is that they wantonly foment disputes for their own ends and to get themselves recognised. There has been some ground for it in the past, though less than is commonly supposed. The industrial Garden of Eden in which labour wanders, happy and innocent, under the protecting care of capital, until the devil enters as an agitator, and brings devastation on that fair scene, is a picture often painted, but seldom from life. And it is less and less often realised. As trade unionism becomes more fully developed and mature, the task of the leader is more and more the composing, not the fomenting of disputes. His difficulty is not in stirring the men up, but in keeping them quiet. The task is no easy one, and demands no common qualities. He stands between the precipice, the deep sea and the devil; he needs a cool head, a clear eye and a firm foot. He must satisfy an exacting, suspicious and often insubordinate set of men; he must reconcile impossible aspirations with the facts of life; he must be conciliatory with employers while firmly maintaining the interests of his clients; he must keep an eye

[1] The last annual report of the National Free Labour Association states, that in thirteen years it has had the support and co-operation of 3,000 employers and 500,000 workmen. Over 19,000 workmen registered in 1904.

on public opinion; and all the time he is liable to have the ground undermined beneath his feet by jealousy and intrigue. A man who can tread this razor edge, as some of our trade union leaders do to-day, commands our respect, and if he sometimes slips let us remember the insecurity of his foothold.

Turning now to the other side of the account and considering how trade unionism has benefited industry, I would first say it has an educative influence. The very essence of character and morality in conduct is the restraint of immediate impulses for the sake of eventual advantage, and organisation demands that. It demands a money sacrifice and a certain amount of discipline; without these it cannot live. And the more developed it is, the more highly ordered and organic it becomes, the more it demands. In self-preservation it is compelled to discourage the shirker, the malingerer, the incompetent and the ruffian. Thus it raises the standard. I do not admit that trade unionists are the salt of the earth, and that non-unionists are beneath contempt. According to my experience there are two broad classes of non-unionists, (1) men too independent to combine, (2) men too weak and self-indulgent. The first class includes some of the very finest workmen, at least equal to any trade unionists. Their attitude is a matter of temperament which I well understand, because it is common among Yorkshiremen, who do not combine at all readily. I knew three men in a signal box; two belonged to the union, the third would not. They were all good men, but he was the best of the three. His mates had nothing against him, they tried to persuade him, but in vain; he was a man who liked to stand on his own feet —a "whole man," as the Germans say. That is the type I mean. The other class are inferior as men and workmen,

and they are far more numerous. If they join a union it elevates them.

I say, then, that trade unionism raises the standard of conduct. It also raises the standard of intelligence; it helps and almost forces men to take an interest in something besides beer and betting. It has also raised the standard of living by improving the conditions of labour. This is a controversial question, on which much argument has been wasted. It may be argued for ever on *a priori* grounds that trade unions can or cannot raise wages and shorten hours; but that is a barren exercise. Trade union effort cannot override economic laws, but within them there is abundant scope for action. The unions may hasten a change which is economically sound, but delayed; they may give it form and definition; they may extend its operation. And more than that; the stand made by organised labour is chiefly responsible for the gradual disappearance of the old idea that labour stands on the same footing as raw material and plant, and for the recognition of a human element, which is governed by different economic laws. That, in particular cases, wages have been raised, hours shortened and other factory conditions improved in response to trade union pressure is incontestable.

But the greatest service of all that they have rendered is the establishment of more stable relations between employers and employed. This is the great advantage in the matter that England possesses over her competitors at the present time, and it results from the higher development of organisation. It is not an artificial arrangement imposed from above nor the product of an idea or a sentiment, but an organic growth sprung from the interaction of needs and circumstances, and, therefore, a real thing possessing vitality

and adaptability. The growth and consolidation of labour organisations have led to the formation of counter-organisations of employers, and from the clash of these opposing forces a new order of things has arisen in which collective bargaining on a great scale has taken the place of piecemeal haggling, and deliberation has been substituted for battle. It has reacted on both sides; it has taught mutual understanding and respect, and it has provided a machinery for adjusting relations in accordance with changing conditions.

This new order is by no means perfect or universal, but it prevails in a more or less complete form in most of the great industries—in mining, engineering and ship-building, iron and steel, cotton, building, boots and shoes, brass-work, lace and dyeing. The form varies, and probably must vary, according to circumstances; but the principle is the same. The conditions are: a strong organisation on both sides, a standing basis of wage rates and other terms of employment, a joint board or committee formed on the principle of equal representation to review them periodically or as occasion may require and to adjust differences that may arise, with or without provision for arbitration in case of disagreement. Strong organisations are essential and the stronger the better; therefore trade unions are necessary to arrive at this state of equilibrium. It is noteworthy that in the pottery trade such a machinery was set up some years ago more than once and with a certain success, but it broke down because of the lack of organisation among the workpeople; trade unionism is very weak in that industry. They get on well enough without it, but the other is the more stable condition.

Its fruits have been strikingly displayed in recent times. Experience shows that labour disputes have usually

been most acute in times of depression following inflation, when employers seek to lower wages and the employed resist. We have recently been passing through such a period, but never have so few disputes occurred. The cotton trade went successfully through a great crisis last year on account of a shortage of cotton; the mill-owners proposed to run short time and the unions assented; without them it could not have been done. The lace trade at Nottingham similarly passed through a crisis, with the help of the union. Large sections of the engineering and shipbuilding trades accepted reductions of wages, again through the offices of the union. The boot and shoe trade has been revolutionised in late years by the introduction of machinery, and that has been accomplished with the help of the unions. In all these and many more cases there would have been, in an earlier stage of trade organisation, prolonged, bitter and disastrous strikes.

The services thus rendered to industry cannot be estimated, but some idea of their value may be gained from the statistics of labour disputes in recent years. The following are taken from the last report of the Board of Trade :—

Labour Disputes in the United Kingdom.

Year.	No. of Disputes.	No. of Workpeople Affected.	Duration in Working Days.
1893	615	634,301	30,467,765
1894	929	325,248	9,529,010
1895	745	263,123	5,724,670
1896	926	198,190	3,746,368
1897	864	230,267	10,345,523
1898	711	253,907	15,289,478
1899	719	180,217	2,516,416
1900	648	188,538	3,152,694
1901	642	179,546	4,142,287
1902	442	256,667	3,479,255
1903	387	116,901	2,338,668
1904	334	83,922	1,416,265

The word "disputes" here means stoppages, but this use is a little misleading, for there are innumerable disputes which do not develop into stoppages. The figures given in the table do not show a diminution in the number of disputes so much as a diminution in the number developing into stoppages; it is a measure of the success attained in prevention, which is chiefly the work of the organised system described. It is as superior to external methods—arbitration, mediation, etc.—as prevention is better than cure. In 1903 788 cases were reported as having been settled by boards, or more than double the number of those which developed into stoppages. But no returns can show the real work done, for much never comes before any boards at all. In the cotton trade, for instance, causes of dispute arise every day and are settled out of hand by the secretaries of the two organisations without recourse to any board. The system is extraordinarily complete and successful in that great industry. There are three provincial districts: Oldham, Bolton and Blackburn; in each is a secretary representing the "masters" and a secretary representing the "operatives," as they are called in Lancashire. Any dispute arising in the district is referred to them; both have a consummate knowledge of the technical details, which are incredibly complicated and not understood by many of the men; they put their heads together and come to an understanding, and there is an end of the matter. This goes on day by day. Very often the trade union secretary settles things direct with a mill without needing to consult his colleague; and it is only when they cannot agree, which is comparatively seldom, that a case is referred to the district joint committee. If the district committee cannot agree it is referred to the central joint committee at

Manchester.[1] But that happens very seldom, and only in serious matters. The real work of agreement and conciliation is done beforehand, and finds no place in the returns.

But even when disputes go on to stoppages, they are most often settled by direct negotiation. The number so settled and by other means in the last five years is as follows: Direct negotiation, 1,746; arbitration, 91; conciliation and mediation, 63. Arbitration and conciliation have their uses, but they only act effectively when the parties are tired of fighting or one wants an excuse to give in, as in the great coal dispute of 1893, which was settled at the Foreign Office. An umpire, as a last resort, in case of inability to agree under a mutual arrangement scheme, is another matter; he is part of the scheme, and in some trades this provision works well.

The advantages of the English system of voluntary

[1] Here is a week from the diary of one of these secretaries, chosen quite at random:—

Monday.—A spinner at Messrs. A. Bros. is spinning 36's on through tubes on weft gauge mules. He is paid ⅛ of a penny per lb. for tubing, but the firm are deducting 1½d. per set for coarse counts. This is wrong. Will speak to Mr. H. (the masters' secretary).

Tuesday.—Mr. H. will get the tubing put right at Messrs. A. Bros.

Wednesday.—Went to Messrs. A.'s, Farnworth, *re* spinning odd counts. They stated that when they did this the orders were small. They promised to do as little of it as possible, and when they did do it would pay the men 2s. 6d. per week extra.

Thursday.—Low wages complained of on 42's pin cops at O. Mill. A complaint of bad spinning and bobbins breaking is to hand from our members at the M. P. Mill Co. Messrs. H. are threatening to discharge minders if a piecer happens an accident while cleaning back carriage wheels, although they will not allow the mules to be stopped to do it. Am to write the firm.

Friday.—Went to M. P. Mill and found the spinning bad. Rims are to be reduced one inch on weft mules. In the afternoon went to P. Spinning Co. to examine some spinning which the men had complained about. With the exception of a few pairs of Curtis's mules which were unsatisfactory, the rest were a fair average spinning.

organisation thus reflected in the comparatively friendly relations of employers and employed, and confirmed by the statistical evidence, are illustrated by the state of things in Germany and America. Though both countries are better provided with means of arbitration imposed from above or from outside,[1] stoppages are more frequent and the feeling, as I have said, entirely different. Trade unionism is still in a comparatively primitive state, and the industrial world is going, or about to go, through the convulsions from which it has emerged, or is emerging, in this country. In the United States, in particular, the spirit pervading the bulk of the trade unions and their methods of action are extremely crude and violent. When I was there I perceived that the industrial world was a huge volcano, groaning and travailing within. The signs were so obvious that I had the temerity to tell many employers, when they spoke with disgust of the unions, that the trouble they had had was nothing to what they were going to have. I believe that, so far, my prediction has been abundantly fulfilled. The recent troubles in New York, Chicago, Colorado and Fall River are merely the larger waves on a widely storm-tossed sea. Comprehensive information is lacking subsequent to 1900; but the record of Massachusetts, by no means the home of violence, is sufficiently instructive. The average number of industrial disputes in the twenty years 1881-1900 was 90 per annum. The lowest number was 15 (1881 and 1883), the highest 175 (1893), whereas in 1903 it was 207, and in 1904 (up to 30th September) it was 198; but the cases were more serious in the latter year.

[1] I purposely omit an account of the methods of arbitration, though I have very full information on the subject. It would take up more space than it is worth, in my opinion. Voluntary arbitration has a very limited application and compulsory arbitration is entirely opposed to the English temperament.

The number on strike and the working days lost were both higher. The report of the Bureau of Statistics states that, including the disputes pending, the total working days lost would aggregate 1,951,976, or more for a single State with a population of less than 3,000,000 than for the whole of the United Kingdom. One very large dispute, the Fall River cotton strike, was responsible for the greater part of this; but that is always the case. It is the few big disputes that swell the figures.

For the purpose of comparison I give the figures for the United States corresponding with those above for the United Kingdom so far as they are available:—

Labour Disputes in the United States.

Year.	No. of Disputes.[1]	No. of Workpeople Affected.
1893	1,610	287,756
1894	2,224	690,044
1895	1,585	407,188
1896	1,077	248,838
1897	1,249	416,154
1898	1,220	263,219
1899	2,120	431,889
1900	3,060	567,719

How far the English and American figures are strictly comparable I do not know, but they indicate the movement in each country. If the American returns were brought up to date they would indicate a far greater difference, for the period since 1900 has been one of increasing storminess. Several of the larger disputes have been attended with a violence unknown in England. It is due partly to the general spirit of lawlessness pervading the United States, partly to

[1] The number of disputes is doubtful. Strikes are distinguished from lock-outs, and under the latter heading the figures relate to the number of establishments involved. The two are added together in the foregoing table.

the heterogeneous racial elements composing American communities, and partly to the violent doctrines preached on behalf of labour. The trade union literature teems with all the old rhetoric about "oppressors" and "oppressed" which have almost disappeared from the grown-up trade unions in England, and the animosity against free labour is much fiercer. Their methods, including the notorious "walking delegate," the black-listing and boycotting of employers, are also very crude.[1] They want to rush everything and try to run before they can walk.

I found a general spirit of optimism prevailing, not so much among employers as among lookers-on, who were confident that the country would find a way of its own out of the trouble and astonish the world; but that is common form and means nothing. The trade unions are equally confident that they are going to astonish the world in the opposite way, and so far they have done more to fulfil expectations. Meantime attempts are being made to reconcile the warring interests of industry on the lines already trodden in England. Profit-sharing schemes are one; organisations of employers another. I have discussed the first in a previous chapter; experience points to the second as the more promising road in the immediate future. Mutual agreements with regard to wages and other conditions are now becoming common in many districts, and I suppose in time a more stable condition will be reached. But it cannot be rushed, and as yet it seems a long way off. Strong organisations are essential, as I have said, and there are exceptional difficulties on both sides. On the side of labour the racial mixture, the restlessness and the

[1] That remarkable novel, *The Walking Delegate* (I forget the author's name), may be overdrawn, but it could not have been written at all of English trade unionism.

migratory habits of the people; on the side of capital the fierce competition for wealth; on both sides the vast extent of the country, which makes personal contact impossible, and personal contact is all-important for mutual understanding.

In Germany the conditions are different, but there, too, the record of disputes shows great and growing restlessness. It only begins with the year 1899: —

Labour Disputes in Germany.

Year.	No. of Disputes.	No. of Workpeople Affected.
1899	1,336 (strikes only)	109,460
1900	1,500 (strikes and lock-outs)	131,810
1901	1,109 ,, ,,	62,682
1902	1,135 ,, ,,	70,184
1903	1,501 ,, ,,	99,414
1904 (ending 30th Sept.)	1,636 ,, ,,	106,372

The building trades are responsible for a very large proportion—considerably more than a third—of the disputes, but those involving the largest number of persons are, as elsewhere, in the mining industry.

The number of strikes shows the restlessness, the comparatively small number of persons affected shows that the unions are not yet strong enough to carry them on upon a great scale; but they are growing rapidly in strength, though disunited. It is the Social Democratic group which employers regard with most apprehension on account of the bitter and implacable propaganda with which it is more or less identified. Whether change be sought by way of legislative action or of industrial disputes the signs of the times are disquieting.

I cherish no illusions about the amicable relations of employers and trade unions in England. The interests of

labour and capital are not identical and never can be. A manufacturing or other business concern may be likened to a band of robbers; the leader and his men have a common interest in securing the spoils, but when it comes to division their interests are also divided. Causes of strife may arise under any conceivable system, even when the wage-takers are also partners; for if an attempt were made to increase the dividend by docking their wages some of them would certainly suffer, unless all their holdings and all their wages were identical, which is impossible in a large concern. No doubt the further community of interest is carried the less likelihood there is of strife, and that is a great argument for "profit-sharing". But that system makes very little progress, and its general adoption is in a distant and nebulous future. Meanwhile causes of strife are very frequent, and sometimes they will and do issue in conflict. Industrial quarrels occur in cycles not only on account of fluctuations of trade, but by reason of changes in current thought and opinion, including public opinion, which often really decides the issue. The present comparatively quiescent stage has only been reached through severe fighting, of which the public has got thoroughly sick, but presently the lust of battle will arise again with younger men. Only the other day the good understanding was within an ace of breaking down in the cotton trade, in which it has lasted many years and in which the machinery has been brought to the highest pitch of efficiency. That shows what may happen. Nevertheless it did not break down. A real advance has been made and something permanent has been gained which will not be lost, although crises may arise.

It is not an arbitrary creation, but an organic growth, as I have said, and to go back on the past will be impossible.

One great change in progress is that the unions are learning discipline, and the leaders are consciously teaching them. Not long ago one of the foremost of them said to me: "The task now before trade unionism in this country is to learn discipline". It was a striking remark and it indicates a recognition of responsibility which constitutes a real advance. The leaders of the greater unions are usually men of more knowledge, insight and judgment than the rank and file and they understand better the need and value of moderation and compromise; but their hands are often tied by their position and they have to swim with the stream before they can stem it. The Taff Vale strike was a signal illustration; it was a case of sheer insubordination. The head executive of the Amalgamated Society of Railway Servants was opposed to the strike, which really arose from the excessive suspiciousness of the men—a feeling which was not justified but which the other side did nothing to allay and much to inflame. I happened to know what was coming. The executive strongly disapproved of the action of the local union but did not feel strong enough to enforce discipline. The local men and their leader were like bolting horses which the driver cannot check until he has first "given them their heads". It was a costly failure, but the result has greatly strengthened the hands of the executives. Undoubtedly the judgment in that case has contributed to the recent diminution of strikes and largely through the increased control exercised by the governing bodies. It has placed more responsibility on them and responsibility entails authority. A notable illustration was afforded by the Amalgamated Society of Engineers in 1903, when the head executive sternly repressed insubordination on the part of the important Clyde district and insisted on their acceptance of a reduction of wages. In a circular letter to the

members, dated 21st May, 1903, the General Secretary wrote :—

> . . . A much-needed lesson has been given in maintenance of trade-union discipline, and it has been made manifest to all concerned that, at all hazards, the executive of the Amalgamated Society of Engineers has the courage of its opinions and is determined not to allow the society to be led on the rocks by irresponsible and inexperienced advisers.

No one knows so well as the leaders the need of discipline, and the Taff Vale judgment cannot be wholly unacceptable to them on reflection.

It is no part of my business to express an opinion on reform of the law, but the present uncertainty can hardly be considered satisfactory and some change is probable. Perhaps the unions are more disquieted than they need be about their position. Picketing is not always necessary to the successful enforcement of their rights, as was signally proved in the great coal struggle of 1893; there was no picketing and no weakening, though they actually starved, men, women and children. Perhaps, on the other hand, their armament has been rendered too weak for safety, which does not tend towards stable relations. Whatever changes are introduced, however, that which has been gained towards stability will not be wholly lost. Storms may arise, but they will be different; troubles that are passed are passed, while for our competitors, sailing the same sea, they lie still ahead.

CHAPTER XV.

PAUPERISM AND THRIFT.

A STATISTICAL comparison of the amount and cost of pauperism in the three countries would be very instructive if it could be made; but, unfortunately, it can not. The material available is not sufficiently comparable. Having attempted it and failed, I am consoled by finding myself in good company. The statistical experts of the British Board of Trade, with all the sources of official information at their command, have met with the same experience.[1] But pauperism is too important a subject to be omitted altogether, and I propose to deal briefly with certain aspects of it which bear upon my subject.

Each country is confronted by precisely the same problems of pauperism. Everywhere there are several classes of needy or helpless persons—the aged, the sick, the infirm, the afflicted, the unfortunate, the idle, the juvenile. The community recognises the duty and assumes the burden of caring for them in different ways. It endeavours to cure or ameliorate the condition of the sick and the afflicted in hospitals, asylums and special institutions (for the deaf and dumb, the blind, etc.), and to educate the juveniles, who are orphaned, deserted or neglected children. With regard to those who are merely indigent from age, misfortune, incapacity or moral obliquity it broadly undertakes no more

[1] *Second Series of Memoranda*, etc., 1904, p. 129. Such statistical comparison as can be made will be found in this Blue-book.

than their maintenance so that they shall not actually die of want. It is with this group—the simple paupers—that I am more particularly concerned; the first group has comparatively little bearing on my inquiry and there is no substantial difference in the methods pursued in the three countries, save in respect to the system of State insurance in Germany, which has already been discussed. I further exclude charity or voluntary agencies. In dealing with all classes of needy persons the community employs both public and private agencies. The latter are exceedingly numerous and varied, and the amount of charity, from standing and from casual sources, cannot be estimated. But it is to be noted that the public and private agencies are to a great extent compensatory and apt to vary inversely. Thus it happens that in Germany, where the system of public relief is more thorough, there is certainly less private charity than in England and America; and this constitutes an important distinction. The amount of charity, endowed or other, is very great in some American communities, notably in Philadelphia; but on the whole, so far as I can judge, it is greatest in England. In particular, the hospital and home-nursing service maintained by voluntary contributions and endowments is very much more general and complete.

To come then to the public relief of ordinary indigent persons, there are some points of difference in the methods employed which require notice; they are analogous to those already discussed in connection with other subjects and pertinent to an international comparison.

England is the original home of State poor relief and still has the most coherent system. The poor law is uniform and based on clear principles with a symmetrical framework of administration. It consists of a central supervising board,

forming a department of State, and local administrative boards elected *ad hoc* on a wide democratic franchise—the Boards of Guardians. For this purpose the country is divided into districts, called poor-law unions, which are distinct from the units of municipal government. The money is raised by local taxation and expended by the Guardians, subject to the control of the Local Government Board, which is exercised through a staff of inspectors. The Guardians are unpaid but they employ salaried officers, whose appointment and pay are subject to the approval of the central authority. The basis of practical administration is the "workhouse," an institution for the reception of destitute persons, supplemented by a greater or less amount of relief given outside to persons who are not inmates. This scheme, originally established in 1834 and subsequently modified from time to time, has on the whole worked well; and it shows that the English people are capable of devising a methodical scheme on well-defined lines, though they seldom or never do it until they are obliged. They were obliged in 1834 by the breakdown of the old poor-law system, the gross abuses which it permitted, the enormous growth and burden of pauperism and the demoralisation of the people.

The new system was intended to remove these evils and it did so to a very great extent. The effective element in it was discrimination, which is the essential condition of successful relief in any form. It was a very simple and elementary kind of discrimination, revived from the ancient poor law, but much better than none at all; it restored the test which had been allowed to lapse in the eighteenth century through the corruption and laxity, which means laziness, of the administrators. The guiding principle was the separation of the really needy from the merely idle by the workhouse test, which rendered the condition of persons

in receipt of relief less desirable than that of persons supporting themselves. In 1844, outdoor relief to the able-bodied was forbidden with some defined exceptions; if they came to the community for assistance they had to enter the workhouse. Under this system the proportion of persons receiving outdoor relief to the total population fell progressively from 5·4 per cent. in 1849 to 1·4 per cent. in 1900, while the total amount of pauperism—indoor and outdoor—fell from 6·2 to 2·1 per cent. of the population. The change was not, of course, wholly due to the poor-law system, but in a large measure it was; outdoor relief fell progressively while indoor relief fluctuated with the state of trade but maintained about the same mean level throughout the period.

Recently, however, there have been signs that the system is breaking down. The workhouse test has failed to check vagrancy, and in some unions outdoor relief has grown to unmanageable proportions. Many changes have taken place since 1834, both in external conditions and in public opinion. The size of urban communities has enormously increased, the standard of living has risen, the poor-law administration has become much more democratic through changes in the law, humanitarian sentiment has become more diffused and the economic lessons of the past have been forgotten. All these changes have tended in one way or another to a gradual disregard of the principles re-established in 1834 and to the growth of indiscriminate relief. Advantage has been taken of a Regulation Order, issued in 1852, which relaxed the prohibition of outdoor relief to able-bodied persons in the largest centres of population, and such relief has been extended in some localities beyond the point contemplated by the law or provided for by the administrative machinery.

The objection to outdoor relief lies in the difficulty of discriminating between cases where it may be of advantage to the community by tiding worthy persons over a period of misfortune and those in which it injures the community by encouraging the unworthy. The machinery for this essential discrimination is totally inadequate when the number of applicants is large. It is supposed to be carried out by paid officers, called relieving officers; but they are far too few for the purpose in any populous union where the guardians readily grant outdoor relief All the shirkers and loafers apply for it, discrimination becomes a farce and the system breaks down. The habit of asking for assistance grows by indulgence, the laxity becomes known and attracts applicants from less easy-going districts, the poor-law machinery is overwhelmed, and the ante-1834 state of things recurs.[1]

It recurs in another way. Laxity breeds demoralisation among the administrators as well as the recipients ; and corruption, both of officers and guardians, follows. It must not, however, be supposed that these faults are universal. The greatest diversity of practice occurs; in some unions outdoor relief has been abolished, in others it is virtually indiscriminate.

The failure of the system has been accentuated since 1900 by the increase and continuance of unemployment, which now presents a very grave problem. The real difficulty again is discrimination, for which no machinery exists. In the winter of 1904-05 a voluntary scheme was organised in London for supplying it and for distributing relief in the

[1] Cases of gross abuse frequently come to light. For instance, a woman was robbed by a lodger of £60 savings; when the case came into court it was found that she had been in receipt of outdoor relief for years, and had saved the money out of it.

form of work, with a certain amount of success, and this has since been placed on a statutory, if provisional, basis by Parliament. Power is given to municipal authorities and boards of guardians to take joint action, in co-operation with charitable agencies, in providing work for the unemployed. It is a momentous step, the effect of which cannot be foreseen. It practically establishes a new authority outside the poor law, and goes a long way towards recognising the right to work. England took the first great step in Socialism as far back as 1601 or earlier, when the State definitely recognised the "right to subsistence"; it has now virtually taken the second step and recognised the "right to work," not under the poor law, but outside it. Its success must depend on adherence to the principle of the workhouse test; that is to say, relief work must be on the whole less desirable than the regular market. If not, the community will in a short time be called upon to provide work for unnumbered hordes, who find it easier to apply to the authority than to look for work themselves. That is what happened in the short-lived experiment made in Paris in 1848, and it is what the unemployed are being aught to demand. It can only end in a total economic breakdown. Apart from individual cases of misfortune "the unemployed" in the mass are always the least capable section; they are the unskilled casual labourers and the less efficient skilled ones who are the first to be turned off. If they are to receive "trade union rates" of wages for the go-as-you-please sort of work which is all that can be got out of them, they will be living upon charity in greater ease than the more industrious and capable, and wholesale demoralisation must result.

This is in the future and rather outside my subject, but it is a corollary to the breakdown of the poor law and

shows the direction in which things are drifting. A Royal Commission has been appointed to inquire into the whole subject, and none too soon.

In the United States pauperism is dealt with on the same lines as in England. I have often seen it stated or implied that there are no paupers in that country. This erroneous belief is probably due to American dislike of the word; the thing is usually concealed under the general term "charity". The euphemism is characteristic and leads to great confusion, for poor-law relief and charity are essentially different; the one implies a recognised public obligation, which cannot be repudiated, the other is merely a favour. As a matter of fact there is a great deal of pauperism in the United States; in some large communities there is even as much as in corresponding ones in England and possibly more. The elements of the population are similar, their occupations are the same and their surrounding conditions only differ in being somewhat more primitive. Tramps are very numerous.

"American poor law is based upon English poor law,"[1] and its methods are broadly the same. Both indoor and outdoor relief is given, and the fundamental institution is the almshouse, as in England, though it is on a much smaller scale. Each State, however, makes its own laws and there is, consequently, great diversity both of law and of administrative machinery. To enter into the varieties would be tedious and is unnecessary; but two or three broad points of difference between the English and American systems are worth noting. The bodies or persons entrusted with the administration in the United States are not elected *ad hoc*, but are nominated or appointed and are generally

[1] Professor C. J. Bushnell in *Modern Methods of Charity*, by Charles Richmond Henderson.

the holders of various other public offices; the administration of the poor law is mixed up with the management of philanthropic institutions and charities; there is no official supervision by a Government department, but instead of it two forms of central control exist in some States: (1) a State board of control, which is an executive, not a supervising body, (2) a board of charities, which is a supervising not an executive body, and consists of unsalaried persons.

The result of all this is a state of great confusion and an absence of any definite guiding principles. The whole thing is in an inchoate stage of development, without form or structure, and with its various elements undifferentiated. The resulting inconveniences and abuses are making themselves felt, as the problem of pauperism becomes more pressing, whether by reason of numerical increase or of a growing consciousness of needs; dissatisfaction with the existing chaos is finding expression, the necessity of more method is being realised and its attainment made the subject of serious study.

Germany, as might be expected, has long since applied such study to the problem, and has evolved a widely different system of her own. Its essential features are so characteristic that they cannot be omitted from any survey of that country, and it is chiefly on their account that this chapter has been introduced.

The State recognises the obligation of providing for the needy, but confines its direct action, save in cases of public disaster, to regulating and supervising the means, which are left in the hands of the local community. The guiding principles of the poor laws are the moral duty and the political expediency of (1) preventing need, and (2) mitigating its effects; but there is no such uniformity as in England either in the laws themselves, which differ in the

several States, or in the machinery of administration which differs according to locality. There are boroughs, rural unions, estate districts and mixed districts; and they administer the law according to local conditions. Such variations, however, are of minor practical importance; they allow for a certain elasticity in the application of guiding principles, but the principle is the main thing. This is characteristic of Germany and a remarkable feature of German methods. The country of regulation by law, above all others, it yet does not lose sight of the end which regulation is intended to effect or allow the means to become an end in itself, which is so constantly done in England. That is one reason why regulation by law is in Germany less irksome in real life than it appears to be on the surface.

The great difference in practice between the German system of poor relief and those of England and America lies in the exercise of much more careful discrimination in the treatment of different classes of needy persons. It is rendered possible, in the first instance, by the system of "papers," which provide a means of identification lacking in England and America. The respectable poor can produce their record, and thus assist classification. German subjects must produce proof of their nationality, and strangers in any locality must show where they come from. There is something to go upon, whereas with us there is nothing but the applicant's own statement, which may be totally false. The recent increase of distress in England, and the attempts that are being made to deal with it in a more scientific and methodical manner, point to the adoption of some form of documentary identification as a basis of classification. It has even been suggested on the part of the trade unions that only members should be entitled to the relief work which is provided under the scheme men-

tioned above. Such a restriction is quite impracticable, because the great majority of those requiring relief do not belong to a union; but the suggestion is interesting as showing the direction in which events are driving a people naturally averse from the interference with individual liberty implied by "papers". Of course, the trade unions have themselves long adopted "papers," for the union card is nothing else. Something of the kind is indispensable to a really scientific system; the only logical alternative is to abolish outdoor relief, extend the workhouse to "labour colonies" on the land, and leave the rest to organised charity. That has the merit of simplicity, and would be easier to carry out than the German system, of which the main features are as follow:—

The local poor-law authority is eventually responsible for the support of those needy persons only who have a legally defined claim on it. The claim is conferred by birth in the locality, by two years' continuous residence, or, in the case of a woman, by marriage. Current relief given to other persons is recoverable from the union they come from, except in the case of illness of dependent persons at work for more than a week in the place, or of apprentices. In such cases the charges for the first thirteen weeks cannot be recovered, but are defrayed by the union where the illness occurs. Strangers coming into a place may be turned out if unable to provide themselves either with housing or maintenance, or if they do not possess the capacity or the means to procure a livelihood. Needy persons also, who require support for other reasons than a temporary incapacity to work, may be returned to their own parish. The claim to relief does not constitute a legal right; it merely imposes a duty on the community. The relief embraces shelter, food, medical care and burial. It does not relieve

relations, husbands, fathers of illegitimate children, and other persons legally responsible from any of their responsibility. Further, the law carefully distinguishes between voluntary and involuntary causes of destitution, and it seeks to prevent pauperism by punishing misconduct which conduces to it. The following are liable to imprisonment: (1) tramps; (2) beggars and those who do not restrain their children from begging; (3) those who do not restrain them from theft, smuggling and poaching; (4) those who bring themselves or persons dependent on them "upon the rates" by gambling, drink, or idleness; (5) who shirk the duty of maintaining those for whom they are responsible in spite of an official order; (6) who refuse to do work given them when in receipt of public support; (7) who fail to obtain work in a given time. We have nothing corresponding to the last class, the "culpably houseless"; and, generally speaking, the German law is much more severe on voluntary or intentional pauperism than our own. They have a capital word—"work-shy"—which is equivalent to "born-tired"; and in dealing with the unemployed are accustomed to distinguish this class. They are certainly very successful in suppressing the tramp or "hobo"; I have only once seen one. I think that their attitude in these matters is a conspicuous illustration of that discriminating intelligence which is probably the most valuable and distinctive quality of the German mind. They do not mix things up. Recognising that moral responsibility is the very foundation of society, they distinguish clearly between the culpable and the unfortunate, and do not allow sympathy with the latter to shelter the former, after the fashion which is causing so much embarrassment in England. Nor does this clear-sightedness entail any hardness of disposition. On the contrary, I have no hesitation in saying that, if there is in

Germany less giving in the way of direct charity, there is more general recognition and fulfilment of personal duty towards the poor than in England or America.

The system embraces both indoor and outdoor relief, but the latter is far more extensively developed. It is thought more advantageous to keep the family together and to restore those who are able to support themselves at all, but have fallen into difficulties, by timely assistance than to encourage them to become total burdens on the community. Complete maintenance in a poorhouse is reserved for the comparatively few, who, by reason of age or infirmity, are totally unable to help themselves and have no other resources.

The workhouse, therefore, is not the fundamental institution and the workhouse test is replaced by investigation, which is effected in towns by the famous Elberfeld system of outdoor relief. This is the most salient feature of the treatment of pauperism in Germany.

A brief reference to it has already been made in the description of Elberfeld. It is applied by dividing the union into districts, and subdividing the districts into beats; each beat is in the charge of a visitor or almoner, who is a citizen of the town and unpaid. The division is so made that each beat contains from two to four cases requiring relief and no more; and it is the duty of the visitor to make himself personally acquainted with their circumstances. As an illustration I may as well take Elberfeld, where the system has been in force since 1852. In 1901 the population was 157,000, the number of districts 37, and the number of poor-beats 518; the average number of cases of outdoor relief was 41·92 to a district and 2·28 to a beat. The number of citizens gratuitously giving their services was 564, and they represented the following callings: manufacturers and merchants, 215; architects, engineers, builders and other

employers, 167 ; officials, teachers, doctors, apothecaries and lawyers, 146 ; landed proprietors, 10 ; other persons of independent means (*Rentner*), 26. In 1903 2 lady visitors were also appointed with a roving commission. In Düsseldorf there were 18 lady visitors. The almoners are nominated by the town authority, and are obliged to undertake the allotted duty. They pay periodical and regular visits to their quarters and investigate cases of need. In this they command the assistance of poor law medical officers employed by the corporation. An almoner finding a case requiring assistance through illness or disablement sends a form to the district medical officer, who examines the case and fills up the form stating whether the individual is (1) permanently, or (2) permanently but only partly, or (3) temporarily incapacitated, and from what cause. The almoner may give a certain amount of relief on his own discretion, and larger amounts are passed for a limited time by a general meeting of the almoners of the district; but the eventual grant rests with the central committee of the town, to whom claims are submitted by the almoners. The committee is wholly business-like, and the almoners have to prove their cases. Thus philanthropic impulse is reconciled with the dispassionate examination of facts demanded by responsibility to the public. Of course everything depends on the administration ; and about that I can only say that they are very well satisfied with it in Elberfeld after an experience of fifty years. It entails no small sacrifice on the part of busy professional men, and their firm adherence to it is a striking illustration of the strong sense of public duty entertained in Germany. In 1903 I found that many of the almoners in Elberfeld had performed this service for over twenty years, seventeen of them for over thirty years, and two for over forty years. During the fifty years'

experience there the annual cost of the outdoor relief has varied from 10½d. to 1s. 9½d. per head of the population; the average cost during the last ten years has been 1s. 6d. per head. The average number of persons in receipt of outdoor relief for the last ten years has been 7·28 per 1,000 of the population. Relief is given in money and in kind, in the shape of food, clothing and bedding. Out of 2,269 cases relieved in 1901, nearly one half—1,072—received money alone, 139 received goods alone, and the rest received both.

Such is the system, excluding minor details, in Elberfeld itself. It has, I believe, been adopted with or without modifications in all the large towns in Germany, except in Alsace-Lorraine, which has different poor laws from the rest. Its essence is exact knowledge of the circumstances in each case, secured by minute subdivision of the inquiry work among an adequate staff of unpaid relieving officers, who are responsible citizens drawn from all classes. If the supply is inadequate, investigation cannot be properly carried out, and the system breaks down. That was the case a few years ago in Hamburg, where an older system, but based on the same principle, had been in operation from an early period. Individual almoners had too many cases to deal with, and laxity followed. In 1892 a modification of the Elberfeld plan, adjusted to the conditions of Hamburg, was adopted. So too in Berlin and some other great cities. Instead of having regular and nearly equal beats the almoners are at the disposal of a district superintendent who allots cases at his discretion. This is more elastic and better suited to very large towns.

The system has not always or everywhere given satisfaction, and critics are not wanting who would prefer the institution of the workhouse and the abolition of outdoor relief. But that principle, as we have seen, has to some

extent broken down in England, and recent movement has been in the opposite direction. My own belief is that the German system is more advantageous to the community, by keeping the home and the family together and preventing the temporarily unfortunate from sinking into permanent pauperism.[1] But it is only possible through the voluntary aid of a large number of persons; administration by a paid staff would be far too costly. Even in Germany the cost is very high and rising. But that is a general experience. The burden tends constantly to increase with the rising standard of living. What were considered superfluities become necessaries. It is said—and I have no doubt truly—that the workmen's insurance, though it may diminish the cost to the community in some respects, has increased this tendency, wherein we may see merely another illustration of the fact that civilisation means preservation of the unfit—whether they be invalids, paupers, lunatics, cripples or criminals. In Germany the cost of pauperism has risen somewhat more rapidly than elsewhere, as the subjoined table will show, and so has the standard of living.

PERCENTAGE CHANGES IN EXPENDITURE PER HEAD OF POPULATION ON POOR RELIEF.[2]

Average of Triennial Period of which Middle Year is—	United Kingdom.	Germany (Berliu, Bavaria, and 15 Towns).	U.S.A. (New York, Massachusetts, and Minnesota).
1885	81·3	73·0	82·1
1890	80·4	77·8	94·6
1895	88·9	89·7	101·5
1900	100·5	100·0	98·3

[1] A considerable number of those temporarily assisted refund money advanced on regaining their position. In Hamburg over £10,000 was so refunded in 1901.—Henderson.

[2] *Second Series of Memoranda*, etc., Board of Trade, 1904. The table only shows the movement in cost for each country; the figures must not be taken to indicate the relative actual cost in each.

The differentiation which characterises German pauper methods extends also to the indoor relief. The almshouses, as I have said, are reserved for the aged and infirm, and are comparatively small. The following figures, giving the number of inmates at the end of 1901, together with the population, in a few of the chief industrial towns, will sufficiently show the part played by this factor in German civil life: Düsseldorf (217,500), 666; Chemnitz (208,500), 132; Elberfeld (157,000), 249; Aachen (136,300), 406; Crefeld (108,908), 129. The discrepancies here shown must not be taken to indicate the relative prevalence of pauperism in the several towns so much as differences in the method and means of dealing with it. In some towns the public poorhouse is supplemented by others on a religious foundation. Crefeld, for instance, has two, with 86 inmates, of whom the town paid for 68. The workhouse paupers, therefore, were 197, not 129. For the sake of comparison I give the number in some corresponding English unions at the end of 1901: Sheffield (229,441), 2,031; Bradford (228,667) 1,125; Oldham (215,624), 1,033; Blackburn (223,520), 959; Rochdale (120,433), 761. The Düsseldorf workhouse comes nearest to the English type; it is called "institution for aged and incapacitated persons of both sexes"; at the end of 1901 it contained 309 men, 324 women, and 33 children.

The German almshouse has neither a hospital department nor a casual ward. Pauper patients go to the general hospitals, and are paid for by the town; the expenditure on this head is a large item. Casuals are otherwise disposed of in different ways according to their character. Tramps and beggars are liable to penal treatment, as I have already said; they are sent to jail or to a workhouse, properly so called—that is, a house of correction—with a

view to reclamation. For other houseless persons provision is made in various ways both by public authorities and philanthropic agencies, but on no regular or uniform plan. The most extensive institution of the kind is the "relief station," where destitute persons on the road can get food and lodging, and are generally required to perform some work in return. They correspond most nearly to the English casual wards. In 1896 there were 1,287 such stations, but the number is diminishing. There are also night shelters and travellers' homes, which serve the same purpose.

Beyond these are the labour colonies and labour registries. They are not under the poor law, but have a considerable bearing on pauperism. The object of the labour colonies is, broadly, to give able-bodied men who have sunk into destitution an opportunity of recovery. The earliest was founded in 1882 near Bielefeld by Pastor von Bodelschwingh, and there are now 33 of them, with accommodation for 4,000. Resort is chiefly had to them in winter.

The labour registries or employment offices are becoming a very material factor in the prevention of pauperism. They are intended to relieve unemployment by providing a medium of exchange between employers in want of hands and persons out of work. Several kinds exist, but the most important are the general registries maintained either by municipal authorities or by voluntary associations, supported by employers, private persons, philanthropic bodies, chambers of commerce, etc., and often subsidised by the municipality. There is a tendency towards the taking over of voluntary registries by municipalities. The growing use made of them is shown by the following figures for Prussia :—

PUBLIC LABOUR REGISTRIES IN PRUSSIA.[1]

Year.	Applications for Situations.	Situations Offered.	Situations Filled.
1897	176,000	145,321	104,332
1898	213,391	181,385	122,128
1899	260,130	242,070	160,643
1900	341,402	272,701	185,917
1901	426,279	262,035	191,848
1902	498,624	294,391	221,263

The utility of registries depends, in the first instance, on the joint use made of them by work givers and work takers, as the Germans properly call them; and, in the second, on the inter-communication between registries in different localities. Both these conditions are as yet imperfectly fulfilled, but as the value of the institution is recognised improvement proceeds. A complete network of registries with a complete system of interchange would probably do more to prevent or mitigate unemployment than any other institution.

From these brief outlines it will be seen that Germany is considerably more advanced on the road towards a scientific treatment of pauperism than England or America. It is still very imperfect and not a little confused; various agencies—poor law, municipal and philanthropic—are mixed up without any definite lines of demarcation. But there is a firmer and more general grasp of essentials and differentiation is more developed. Both in England and America several of the institutions mentioned, such as night shelters, farm colonies and labour registries, have been adopted in a tentative way, and great interest is taken in such matters; but humanitarian impulse and a vague desire

[1] From *Report to the Board of Trade on the Unemployed in Foreign Countries*, by D. F. Schloss, 1904. This report contains full details.

to "do something" are much more conspicuous than any real grasp of the problem. Institutions are copied in response to some outcry without any real understanding of their nature and purpose. Exception must be made of the Charity Organisation Society of London, which applies the lessons of experience to philanthropy and has been extensively copied in the United States; but the suspicion and dislike with which it is regarded by large sections of the people indicate the general preference of impulse to reason. The broad difference with the Germans is that they put more brains and more trouble into the task; and in particular they think it a good investment to apply both to the prevention of pauperism. Hence the State insurance and the poor law outdoor relief, which must be taken together. They are largely responsible for the absence of misery and squalor in the mass, which strikes every observer, as compared with England and the United States.

Thrift.

Thrift is even less susceptible of statistical comparison than pauperism. The channels are so numerous and varied, and information about some of them is so scanty, that a summary statement is impossible. In addition to savings banks, friendly, co-operative and building societies, trade unions and insurance of different kinds, there are investments, hoarding, house ownership and innumerable little clubs for the purchase of various things. About some of these information fails altogether, about others it is defective; and even if the pecuniary amount of thrift which they represent were known the class of persons is not, or but very roughly, save in the case of trade unions. I am obliged to content myself with broad conclusions derived partly from the study of such statistics as there are, partly

from observation and inquiry. I give them for what they may be worth.

Savings banks are, I suppose, the most direct form of thrift after the domestic stocking, which is presumably dying out, and they constitute the largest single item. The following table shows the amount per head of population standing to the credit of depositors at three periods :—

AMOUNT IN SAVINGS BANKS PER HEAD OF POPULATION.[1]

Year.	United Kingdom.	Germany (Prussia, Bavaria, Baden).	United States.
	£ s. d.	£ s. d.	£ s. d.
1881	2 6 0	2 16 10	3 12 5
1891	3 0 7	5 2 6	5 5 11
1901	4 12 7	8 3 3	6 19 4

As a measure of thrift the table must be used for comparing the movement in each country rather than the actual amount. The striking thing is the great relative increase in Germany. The proportional amount has trebled in three years, whereas in the United Kingdom it has just doubled, and in the United States, which started from a higher basis, it has fallen short of doubling. Figures for the whole of Germany are not available for the earlier years, but in 1901 the corresponding amount was £8 8s. 0d., which is still more favourable. The facts only prove that the increase of deposits in savings banks has been much greater in Germany than in the United Kingdom or the United States, and that the proportional amount now standing to the credit of depositors is considerably higher there than in the United States and very much higher than in the United Kingdom.

[1] *Second Series of Memoranda*, etc., Board of Trade, 1904.

Further inferences must be a matter of opinion. My own is that the savings banks figures do represent approximately the relative degrees of thrift attained in these three countries. The late Registrar of Friendly Societies for the United Kingdom, in a paper on the subject read before the British Association in 1904, returned the total amount of savings in the several institutions coming under his purview at £360,000,000, of which five-ninths, or £200,000,000 were in savings banks. The rest were thus distributed:—

	£
Building Societies	62,000,000
Friendly Societies	43,000,000
Co-operative Societies	40,000,000
Trade Unions	5,000,000

The list does not exhaust the savings in the United Kingdom, but even as far as it goes it shows that savings banks are only one item and that other agencies represent perhaps as much, or nearly as much, in the aggregate. I do not forget that. But those other agencies exist in Germany and America too, and some additional ones besides, notably the compulsory sickness and old age insurance in Germany. The several institutions vary in importance, no doubt; trade unions represent a much larger sum in this country, and co-operative societies are of small account in America; but on the other hand, the building and loan associations are far more developed there; in 1901 their assets amounted to over £121,000,000.[1]

But figures do not of themselves give any real insight, because they tell nothing of the persons who save or the class to which they belong. From the rather meagre information concerning depositors in savings banks, it is evident that a large proportion do not belong to the "working-classes,"

[1] *Bulletin of the Bureau of Labour*, No. 55.

but it is not possible to say what the real proportions are. We have to fall back on inquiry and observation. The result of my own is to leave no doubt in my mind that thrift is much more diffused among the working-classes in Germany and somewhat more in America than it is here. We have some very thrifty work-people in England, particularly in the north. I know of mill-hands in the West Riding of Yorkshire, where the people are, I think, more careful than anywhere else, who have saved as much as £1,000; but the bulk of the English working-classes do not know what thrift is. They live from week to week or from day to day and never think of attempting to put by anything. When money is plentiful they spend it at once; when it is not, they are in difficulties. Very often they spend it before it is earned; a man who has received 30s., 40s. or 50s. on Saturday wants an advance or "sub," as they call it, on Monday. And it is not only that they do not attempt to save, but they squander the money they have in the most reckless fashion. Their habitual waste and extravagance would bring a middle-class household to ruin. The wretched state of so many homes is due far more to expenditure on drink, betting, women and amusements than to lack of means.[1] The multitude of pawnshops, which live on improvidence, is alone strong evidence of the habits of the people.[2] The contrast afforded by the poor Jews is another proof. Improvidence is shown not only in the mis-spending of money, but in the habitual waste of food, fuel and clothing to an astonishing extent.

[1] Mr. Rowntree's inquiry into poverty in York produced the following numerical results: Number of persons living in "primary" poverty (insufficient means), 7,230; number living in "secondary" poverty (sufficient means but mis-spent), 13,072.

[2] In Germany they are conducted by the municipal authorities, and there is only one even in large towns.

In all these respects the poor fairly compete with the rich, whose example they faithfully follow and frequently surpass.

Now in the same classes in Germany, improvidence is the exception and thrift the rule. It is taught and it is imposed. A large part of the State insurance is a form of compulsory thrift, as I have pointed out, and compulsory savings banks are general in connection with factories, workshops and other establishments. The home is usually conducted with the utmost economy and everything is made to go as far as possible. This also is taught, and is in a sense, compulsory. Wasteful habits are not acquired, because the people cannot afford to waste what they have got. They are not wealthy enough, nor is the country. The classes above set a better example in this respect than in England.

In the United States there is the wealth and it undoubtedly leads to a great deal of waste and extravagance of living. The rich set as bad an example as they can. Ostentatious extravagance is the one road to distinction open to them, and the microscopic record of their doings purveyed to a servile public makes their example more conspicuous than in any other country. High wages also permit and encourage extravagance in the working-classes, and of the women it may be said that they are brought up to extravagance. The revelations of Mrs. Van Vorst[1] regarding factory girls, their reasons for seeking employment and their expenditure on dress, merely bear out the impressions derived from less intimate observation. But there are some counteracting forces. Life on the land, which still plays a large part in the social economy of the United States, tends to a lingering hold on the older

[1] *The Woman who Toils.*

virtues. Money is never wrested easily from the soil except in placer gold diggings ; the difficulty fosters an instinct for sticking to it, and the life gives little opportunity for throwing it away. Then there is a large leaven of thrifty races—Jews, Germans and Scandinavians—coming in, and they do not all lose their virtue. The very extravagance of the women, again, imposes a certain amount of prudence on the men. But more important than any of these is the atmosphere of social aspiration. The desire to "get on," which is such a powerful stimulus to prudence in the lower middle classes in England is stronger in America, and it permeates the working-classes as it does not in England. In order to "get on" a man must work hard and exercise prudence, and they do it. Saving, I learnt from English workmen there, is practised more than at home.

CHAPTER XVI.

ELEMENTARY EDUCATION.

THE subject of education is so vast and complex that I find myself compelled to treat it in the most summary fashion, and to select from the results of a laborious study only those points which seem to have a direct and substantial bearing on my subject, avoiding details as far as possible. I am freer to do this in dealing with education than with most other subjects on my list, because it is so very fully treated in official and other publications. Those who make a special study of it are acquainted with the details or know where to find them; those who do not will be glad to be spared them. Moreover, I am not so much concerned with the educational apparatus in general as with what is important in the differences between the three countries. It is not necessary for me, therefore, to lay out in full the entire groundwork—the law, the organisation, the management, curriculum, and so forth—which would indeed occupy many volumes; it will be enough for my purpose to pick out the most salient features, and I shall confine myself in the main to elementary and technical education.

There is or has been up to now a fundamental difference between England on the one hand, and Germany and America on the other, in regard to the general education of the people. The two latter countries have for a long time had State education based on a principle or an idea; England

has only just established it. The causes of this difference are historical and I need not enter into them at length, but I wish to point out the nature of the difference, which does not seem to be clearly realised.

It is the difference between public and private education. In the former, the State or the community pays; in the latter, the parents or, if it is gratuitous, the body which carries it on. And "he who pays the piper calls the tune". In a private school (including, of course, the expensive private institutions called "public schools" in England) the parents usually pay, and they choose the kind of schooling they wish for their children. It is a commercial business like any other, based on supply and demand. This fact is perpetually forgotten in the recurrent controversy about the English public schools—Eton, Harrow, Winchester, Rugby, etc. Whatever may be the faults of the education they offer, it is supplied in response to a demand. The parents, who pay, want a certain article, and they think they get it. If they did not they would go elsewhere. If they wanted a different article the schools would modify themselves (as they do) to meet the demand, or others would spring up. As a matter of fact the demand for the education supplied is so great that these worthless institutions (so they are denounced) are continually increasing in number and size, and it is more and more difficult to get a boy into them at all unless he is clever or has had his name on the list for years.

I use this class of school as an illustration. The personal views of the parents, who pay, really determine the kind of education given, and the requirements of the community are not directly considered. When schools are carried on more or less gratuitously, as they all once were, by religious or other bodies, those who conduct them give

the kind of education they think fit. The parents may sometimes have a certain option between rival establishments, or attention may be accorded to their wishes; but whether this be so or not the guiding influence in the philanthropic, as in the commercial establishment, is of a private character and the immediate object is to give effect to the views of individuals or sections of the community. They have their own principles or ideas, and apply them at their pleasure.

When, however, the community itself pays the piper and therefore has a right to call the tune it substitutes, nominally at least, for such private or sectional principles its own views of what is desirable. The aim is changed; it is no longer what some person or body desires, but what will benefit the community as a whole. Thus it becomes necessary to formulate some principle or idea on which national education is to be based in the interests of the community at large. England has only just reached this point. Down to 1870 elementary education was virtually private; it was conducted by religious bodies, with some State aid and State supervision, and parents paid a small fee. Increase of population and of requirements gradually rendered the provision inadequate in some localities and it was supplemented by schools provided at the public cost and administered by local boards elected for the purpose. The aim of the new schools was different from that of the old, but no principles of national education were formulated; there was only a sort of compromise between the traditional sectarian ideals and the vague purpose of bodies representing the general public, but hardly conscious of their functions and often totally unfitted to perform them. This half and half state of things continued down to 1902, when a great step towards a homogeneous national system was

taken by abolishing the school boards and placing all the schools under the ordinary local authorities, while preserving a certain distinction between the two classes of schools in regard to management. This step has been accompanied by the recognition of a national aim in education and the formulation of guiding principles by the central authority. But they have not been sufficiently long in operation to produce any effect.

Both in Germany and the United States popular education was here and there undertaken by the community from an early date and both have long since developed public systems with national ideals. Their ideals are not the same; they differ in some very important respects, but both have consciously in view the welfare of the community as a whole apart from sectional or personal predilections; and that constitutes a fundamental distinction between them and the English system hitherto maintained.

I do not mean to say that a private or sectional system may not ultimately have in view the welfare of the community. It generally has; and may, indeed, come nearer to realising it than a national or communal system. But it identifies the general welfare with some particular end of its own, which is only a means but becomes to it the real and immediate end. Thus a religious body, believing the inculcation of certain doctrines to be the only true basis of national welfare, makes them a cardinal and essential point in its school system, an end in themselves. It may be quite right; but the community which includes other religious bodies and independent elements has a different point of view. It looks beyond such teaching and regards it as a means, which may be approved or not.

The United States.

What is or should be the ultimate aim of national education? Undoubtedly the national welfare, and that would undoubtedly be best attained by so training the children as to get out of each child in mature life the best service of which it is capable, or (alternatively) by preparing each child to perform, in the best way, the functions for which it is best fitted. No system fulfils this ideal or anything approaching to it; but the fundamental principle of national education in America—equality of opportunity—is in accordance with it and does form the basis of a true ideal. This is the distinguishing feature which chiefly impresses strangers, and rightly so; it is truly American and the outcome of that democratic spirit which is still the life-blood of the American people. The school is, indeed, its chief stronghold and perhaps its last hope. "To-day Home and Church are visibly disintegrating,"[1] and the State—well, no one pretends that public life, any more than private, is moving towards the ideal democracy.[2] There remains the school, and to it thoughtful Americans cling passionately. Writers on education have the word democracy for ever in their mouths; and the university, which is the coping stone, has been defined by one of the most distinguished of them as the prophet and priest of democracy.[3] They look to the school with faith and hope, tempered by no little misgiving. This identification of the school with democracy is, I believe, the chief cause of that

[1] *American Schools*, by William Estabrook Chancellor, p. 321.

[2] "It is not to be expected that many people in any generation of the near future will be able to dream dreams or to see visions of an age of opportunity for all, of freedom from handicaps by birth, of entire absence of all inherited or government based privileges of property or station, and of equal justice at law and before the bar of public opinion" (*loc. cit.*).

[3] *The Trend in Higher Education in America*, by William Rainey Harper, President of the University of Chicago.

keen interest in education which has struck so many observers. The interest is not so general as some of them have supposed. Mr. Chancellor, writing from a large experience, says:—

> The efforts that have been made in the cities of the United States to interest the fathers of the school children in the schools have usually proven fruitless. The American father, whether a business manager or a clerk, a mechanic or manual labourer, is seldom deeply concerned for the educational welfare of his children. He is too busy to attend to these matters. The American mothers likewise are usually too busy with home affairs to interest themselves as a class in even those matters lying outside of the home that are as near to the home interests as are the affairs of the schools (*American Schools*, p. 292).

The general drift of his book is to emphasise the opposition encountered by the school superintendent and the difficulty of getting people to take a real and intelligent interest in education, and the standing complaint of educationists is the niggardly attitude of the public. Still I have no doubt that more interest is taken in the United States than in England, where a large proportion of the working-classes simply hate the schools and a still larger proportion of the upper classes take no interest in them at all except to grumble at the cost. So far as I can judge, more general interest in education is taken in Germany than in either country; and the school attendance testifies to it. But the distinguishing thing in America is the passionate interest taken by thoughtful men and the permeation of their views with the idea of democracy.

An ideal, however, is one thing, its realisation another. Some attempt is made to realise the democratic ideal of "equality of opportunity". Elementary schooling is everywhere free and provision is made for continuing it up through the higher grades. According to the Commissioner of Education's Annual Report for 1901, the age up to which free attendance at public schools is allowed in the several

States is as follows: No limit, two States (Massachusetts and Connecticut); 21 years, 29 States; 20 years, 7 States; 18 years, 4 States; 17 years in the district of Columbia and Texas; the rest indeterminate or unknown. Considerable and increasing use is made of the privilege of prolonging free education beyond the elementary stage. In 1901 there were 558,740 pupils receiving secondary instruction (high school grade) in public schools, and 89,933 students receiving higher education in public universities and colleges, professional and normal (teachers' training) schools.

Here is something done towards neutralising the accidents of birth and perhaps it is as much as education alone can do. One can understand the admiration of English trade unionists who have at home lacked the "educational advantages" to which they feel themselves entitled by nature. But it is less in reality than it looks. Power to utilise the opportunities offered still depends on home circumstances, and there is no guarantee that those who possess it are the ones most likely to profit by it. The great bulk of the children proceed to earn their living the moment they reach the elementary age limit and not infrequently before. Moreover the equality which the public school is intended to secure is to a considerable extent countermined by private schools, which give a superior education in the higher grades. The following figures show the relations :—

Number of Pupils in Public and Private Schools, U.S.A., 1901.[1]

Grade.	Public.	Private.
Elementary	15,061,721	1,261,672
Secondary	558,740	177,260
Higher (Universities, etc.) . .	89,933	149,904

[1] *Annual Report of the U.S. Commissioner of Education.*

The private elementary schools are chiefly maintained by religious bodies, and the great majority are Roman Catholic.

The public institutions giving higher education are chiefly State universities, agricultural colleges and normal schools. The number charging no fees at all is very small, but a good many charge merely nominal fees.

A great many parents who can afford it prefer to send their children to the private school, and that tendency seems to be growing although contrary to the national ideal. The picture of the statesman's or millionaire's son at the same bench with the labourer's has a touch of the shop-window about it. As for the highest education, which is given at the older universities, it appears to be much less within reach of the poor than Oxford, Cambridge, or any German university. Thus the accidents of birth re-assert themselves, and the ideal fades. As a "capacity catcher"—and therefore conducing to the ultimate aim of national education—it is quite possible that the ladder formed by a generous but judicious system of scholarships is superior to the door nominally open to all but really closed by circumstances; for some go in who cannot profit and others who might are kept out. The selective agency is wrong, and it is shown by the significant fact that the female students outnumber the male in the public high schools by 3 to 2.

So much for the principle of equal opportunity and the extent to which it is applied. I have taken it first, because from the point of view of national education it is, in itself, a step nearer the ideal than either Germany or England has attained. But of course its effect depends not only on the extent to which it is applied, but also on the manner; that is, on the kind of education given. Probably the clearest way of continuing my comparison will be to deal with that at once and then return to the other countries.

I do not find evidence of any clear or general conception of what education should be in the United States beyond the general principle of equal opportunity. There is no national system with a definite aim, although there is national education based on a definite principle. This distinction does not appear to be at all understood. The United States Commissioner of Education observes that visitors always come to Washington and ask for the laws and regulations controlling the American system of education. That is so, and they will continue to do it because they are always given to understand that there is a national system, implying some degree of centralisation and homogeneity. But beyond what I have said there is no national system. There is free education for every child for a period of years varying at the commencement from four to eight years of age and at the conclusion from seventeen to no limit. There is no uniformity even in the one common feature; and beyond it the only general conception is a vague idea that "school" is necessary for producing good American citizens and putting boys and girls in a position to "get on" in life. The manner in which these very indefinite aims are pursued varies indefinitely in every detail I do not mean to say that such primitive ideas are the only conception of school education. On the contrary, its nature and purpose are nowhere made the subject of more earnest and elaborate discussion than in professional circles in the United States. The Commissioner of Education has formulated the following general definitions :—

The school is the auxiliary institution founded for the purpose of reinforcing the education of the four fundamental institutions of civilisation. These are the family, civil society (devoted to providing for the wants of food, clothing and shelter), the State, the Church. The characteristic of the school is that it deals with the means necessary for the acquirement, preservation and communication of intelligence. . . . The

difference between the part of education acquired in the family and that acquired in the school is immense and incalculable. . . . The education of the family is in use and wont and it trains rather than instructs. The result is unconscious habit and ungrounded prejudice or inclination. . . . But the school lays all its stress on producing a consciousness of the grounds and reasons of things. I should not say all its stress, for the school does in fact lay much stress on what is called discipline—on habits of alert and critical attention, on regularity and punctuality and self-control and politeness. But the mere mention of these elements of discipline shows that they too are of a higher order than the habit of the family, inasmuch as they all require the exertion of both will and intellect consciously in order to attain them. The discipline of the school forms a sort of conscious superstructure to the unconscious basis of habits which have been acquired in the family.

School instruction, on the other hand, is given to the acquirement of techniques; the technique of reading and writing, of mathematics, of grammar, of geography, history, literature and science in general. . . . The mastery of the technique of reading, writing, geography and history lifts the pupil into a plane of freedom hitherto not known to him. He can now by his own effort master for himself the wisdom of the race. . . . The school gives the youth the tools of thought.[1]

The accomplished Commissioner possesses no administrative jurisdiction, but he is here speaking officially for educational America, and doubtless he fairly represents its views. Similar utterances are widely current. We find constant references to the four (or five) "fundamental institutions" of civilisation and to the demarcation of their provinces. The school is here essentially the portal to knowledge, with the discipline of routine thrown in; its province is "self-culture" or "self-direction". The Americans are very fond of these and similar high-sounding terms, but they do not contain much practical guidance in the treatment of children. So far as a precise meaning can be given to them, they suggest a narrow function for the school. There is nothing here about duty or obedience or character, nothing about bodily needs; the whole ethical and physical sides of education are apparently either relegated to the home and

[1] *Monographs on Education in the United States*, No. 3, by William P. Harris, United States Commissioner of Education.

the church, or are supposed to be implicitly involved in the acquisition of knowledge. They are not directly contemplated as a primary function of the school.

With indefiniteness of aim and lack of central guidance or control it is not surprising to find enormous discrepancies in the methods. Each State makes its own laws and regulations, and though some are sufficiently alike that they can be grouped, there is no uniformity, even in primary and essential points. I have mentioned the age-differences to which the one universal provision of free attendance is subject. Its complement, compulsory attendance, exhibits far greater discrepancies. I read in a recent account that the lowest age up to which children must attend school is thirteen years; but, as a matter of plain fact, to be read in the official reports, more than a dozen States have no compulsory attendance at all, and I have been in some of those States. It is a very important matter from the industrial point of view, because of its effect on juvenile labour; and an account of education in America which does not take cognisance of it is seriously misleading.[1] In the other States, which have compulsory attendance, the age at which it begins is seven (10 States) and eight (23 States); the age at which it ceases varies from twelve to sixteen years (7 States), in the great majority it is fourteen years.

The length of the school year—another important elementary point—varies to an extraordinary degree. Hardly any two States have the same. The average number of school-days in the year 1900-01 was 144·2 for the United States, and it ranged from 76·1 in North Carolina to 191 in

[1] Personally conducted visitors to a country see, and are intended to see, the best. That is quite right and very instructive; but they should not forget the limitation or ignore it in reporting what they see.

Rhode Island. Thus we have two important cotton manufacturing States; the one has no compulsory attendance, and schools open on the average for less than three months in the year, the other has compulsory attendance from seven to fourteen years, and schools open for thirty-two weeks. The average number of days actually attended by each pupil in North Carolina was only 44·6, equivalent to about seven weeks. What sort of a "national system" is that? North Carolina is at the bottom of the list, but there were 27 States in which the average attendance was less than 100 days, or between three and four months. Again, in some of the most advanced communities, the school accommodation is insufficient, and some of the children have to be taken in morning and evening shifts, thus reducing the nominal day to one-half.

These things are not pointed out in a spirit of depreciation; they are elementary facts in the situation, and must be noted if it is to be represented with any approach to accuracy. I shall have to mention other discrepancies presently. But perhaps enough has been said on this head to enable the reader to apply the necessary qualification to the phrase "the American system of education". We can pass on to some points of administration.

In spite of the discrepancies a tendency towards greater uniformity is visible, and a form of administration is being developed in the leading communities, not identical, but similar in essentials. The central figure is the school superintendent, a superior officer who has all the executive threads in his hands, and stands between the schools with their staffs, the governing body, which finds the money, and the parents. The governing body is a board of some kind representing the local public, but constituted and elected in various ways. Its relations to the State and to the schools

also vary. The State legislature is supreme within the State in regard to education; it makes the laws and it finds some of the money. The State government may also exercise a varying amount of control through a State board of education. According to Mr. Chancellor, State control and centralisation are increasing, and the jurisdiction of the local board is becoming confined to finance, the provision of buildings, salaries and so on, while all the executive details, such as appointment of teachers, choice of text-books, arrangement of curriculum, and so forth, are left to the superintendent and the staffs. The superintendent is appointed by the board for a short term of years, three or four; and he has a seat on it. Under him he has, besides the teaching staff, "supervisors" for special subjects. His relation to the board is likened to that of an attorney to his client by Mr. Chancellor, to whose interesting book the reader is referred for further details.[1]

The teaching staff is, by universal consent, a weak point in American schools. The vast majority of the teachers are women. In 1901 the numbers were: female, 306,063, male, 123,941—total, 430,004; and the preponderance is increasing rapidly. The percentage of male teachers was 42·8 in 1880, in 1900 it had sunk to 28·8. The reason, or chief reason is that women are cheaper, which does not quite bear out the account given by English panegyrists of the boundless generosity and enthusiasm for education of the American public. The cry of American educational workers is that the schools are starved, and principally in the matter of teaching staffs. The average annual salaries paid in all the States reporting in 1901 were: male teachers, £114; female, £96. In the United States this is hardly a living wage for persons having any appearance to keep up;

[1] *American Schools*, by William Estabrook Chancellor.

but a general average does not tell much. The standard varies in different States as widely as any other condition. The average for male teachers is highest in Massachusetts with £338, lowest in North Carolina with about £60. Nothing surprises one in North Carolina, but the singular thing is the great difference shown by northern and not dissimilar States. Thus against £338 in Massachusetts, Maine has £85, Pennsylvania £108, and Ohio £96. The causes of difference are no doubt various; one is the relative proportion of urban and rural schools, a second the superior development of higher education in some States, a third the varying length of the school year and a fourth seems to be the source of revenue. Funds are obtained from local taxation, from the State, from permanent funds and "other sources"; and the proportions differ enormously. Thus the proportion from local taxes in Massachusetts is 97·2 per cent., in North Carolina it is 1·4 per cent. For the United States as a whole the proportions are: State, 16·4 per cent., local taxes, 68·6 per cent., permanent funds, 4·2 per cent., other sources, 10·8 per cent. Salaries seem to run higher as a rule where more money is obtained from local taxation.

The salaries just given apparently include those of teachers in the higher public schools and consequently they cannot be compared with those of teachers in elementary schools in other countries; but it is clear that the salaries of many elementary teachers in America are excessively low. One result of this and of the great preponderance of women is much "wastage" of teachers. Teaching is taken up for a time as a stop-gap, and many of the women marry. The same thing happens in England; in neither country is teaching a standard profession such as it is in Germany. But in the United States a large and increasing number of teachers receive professional training. In 1901 nearly 15,000

teacher graduates were being sent out every year. The total number of students pursuing training courses for teachers enrolled in various institutions, public and private, was 94,157 ; there were 170 public and 118 private "normal" schools with 43,372 and 20,030 students, respectively.

Professional training is more developed than in England, but it is neither so complete nor so thorough as in Germany, and the quality of it has been strongly criticised. Nevertheless teachers are, as a rule, very zealous and imbued with enthusiasm.

Co-education is the rule in the Central and Western States, but less general in the urban schools of the older States. The merits of the system are a disputed point on which I have not sufficient experience to offer an opinion ; but the apparent results do not inspire any wish to see the American plan adopted here, and so far as I can learn that is the effect produced on most Englishmen.

Corporal punishment is regarded with disfavour, and in many communities it is only permitted under rigid restrictions. In one State and in several other cities it is forbidden. The most unruly children are sent to special institutions. Truancy is common.

With regard to school buildings they are better warmed than ours but not superior in other respects. As in factories, too little attention is paid to light.

With regard to curriculum it is virtually the same as elsewhere, and the only points that require notice are the teaching of patriotism and of temperance and the non-teaching of religion. Much stress is laid on the first, both in text-books and in school routine, and it is a potent factor in the Americanisation of the very large foreign juvenile element. The teaching of temperance is vitiated by the use of text-books containing statements which every-

body knows to be false. The gradual dropping of religion is a feature of the utmost importance. It is said that "the religious difficulty" has been "disposed of," and that is true. There is no religious question in the public schools, and no religion. Dogmatic, that is denominational, teaching was given up to appease sectarian animosities and Bible reading substituted; that has been quietly dropped by degrees and the foundations of Western morality have, in effect, disappeared from the public schools. *Pari passu*, attendance at Sunday schools has dropped off. It is easy to dispose of the religious difficulty by disposing of religion. In like manner the education difficulty is disposed of in the Andaman islands.

With regard to results it must be remembered that the task of the public schools in the United States is unique and of peculiar difficulty on account of the mixed nationalities. In many communities two-thirds of the children are of foreign and often illiterate parentage. They go to school as a rule from seven or eight to fourteen years, though evasions of the laws relating to school attendance and employment are very numerous. For the younger children kindergartens are extensively developed in many cities, and for older ones evening schools, which are attended by those employed in the day. They are particularly numerous in New York, Philadelphia and Boston. The first essential is that the children shall be fitted for the privilege of American citizenship by acquiring the language, to read and write, and learning to appreciate the flag and what it stands for. These two objects are well attained. The course turns the children out good Americans and reduces illiteracy to a low point, considering the character of the population. It also sharpens their intelligence and fosters ambition. The common school must be credited with

a large share in producing the commercial success of the United States by fostering the qualities which conspicuously contribute to it. An exceptional amount of attention is paid to arithmetic, which perhaps accounts for the exceptional bent for business as compared with industry. American trained children in towns do not take to hand labour, which is mainly performed by foreigners; they go by preference into shops and offices. The notion that American education turns out better workmen is a delusion; but it does turn out keener men of business.

There are some obvious defects. One is the general American weakness of accepting a showy pretence for a solid article. Children are taught to repeat things which have no real meaning to them in the attempt to arrive at knowledge which is beyond them by a short cut. "The evil of memorising words without understanding their meaning or verifying the statements made in the text-book . . . is perhaps the most widely prevailing defect in teaching to be found in the schools of the United States" (United States Commissioner of Education). I happened to witness an illustration which impressed me. I was taken to see the best school in a very great city, and among other things I heard a lesson given by the head teacher (a woman) to the head class, composed of superior boys and girls of about fifteen. It was in mensuration, and they were using a text-book full of technical terms, such as oblate and prolate spheroids, horizon and parallels. The children mumbled in a painfully slovenly and indistinct way, and it seemed to me they had not the slightest idea of what they were talking about. I said to the teacher: "Do they understand the meaning of these words?" "That is just what I am going to take them on," she said, and turning to the class, "Now, what do oblate and prolate spheroids mean?" No answer.

"Get out your dictionaries." All the dictionaries came out. "Read out the definitions." A boy standing up read them out. It was no more than was in the text-book and added nothing to their knowledge, but everyone was satisfied. I said to her: "But do they know why these words mean that?" She did not know herself, and the subject dropped perforce; the lesson was pretentious make-believe. Yet she was a good teacher—the best he had the superintendent said—and very much in earnest.

The ethical results of schooling give much food for thought. It would be impertinent in a foreigner to endorse the searching and often scathing criticisms of American education and its results, which it is the right or duty of American leaders of education to make, but he is bound to note the utterances of such men as President Eliot of Harvard University, President Harper of Chicago University, President Stanley Hall of Clark University; not faddists or alarmists, but thoughtful and experienced men, who have the greatest faith in American education and in the future of the country. It is not mere opinion on their part, they point to results, to the corruption in public life, the growth of lawlessness, violence and juvenile crime, the increasing prevalence of divorce, the taste for foolish, false and degrading literature, for immoral and unwholesome amusements, to the want of reverence and the failure of the churches. There is great uneasiness about the moral health of the people revealed by these and other symptoms. Has an education devoid of an authoritative basis of morality nothing to do with it? "We cannot teach duty or the spirit of obedience. . . . A rapidly progressive ignorance of the very Bible we profess to revere. . . . The percentage of juvenile crimes and the average age of first commitment

grows steadily earlier."[1] Have these things no connection? "Home and Church are visibly disintegrating," says Mr. Chancellor, and surely that is rather a serious prospect. How can the schools be acquitted of all responsibility if they are to be credited with any influence at all? It is playing with the question to attribute to them everything good and to exonerate them from everything bad in American life. "There is something fundamentally right," says President Harper in a tone of subdued regret, "in the German usage which includes religion as one of the subjects of study from the earliest stages of the child's educational development."[2]

Now it behoves us in this country to study very carefully the object lessons offered by our neighbours in this matter, because the choice of following one direction or the other lies at this moment before us. I pass at once to the case of Germany.

Germany.

Elementary education in Germany presents a most striking and instructive contrast to that in the United States. In the development of national schools Germany was chronologically ahead, and in the completeness of her national system she is still ahead now. But it is based on an entirely different idea. Americans are fond of laying stress on the "vertical" structure of society in the United States as compared with the horizontal structure in Europe, meaning that they have not the division into social classes which exists in the older world. As regards England the difference is not nearly so great as they suppose; they exaggerate the importance of class distinctions here and

[1] *Adolescence*, by G. Stanley Hall, p. xvii.
[2] *The Trend in Higher Education*, by William Rainey Harper, p. 70.

minimise their own class distinctions which are considerable and increasing. But as regards Germany the comparison is valid, though there too the distinctions are being relaxed. Men of mark in commerce and industry have an honourable position though they be neither "born," nor in the government service, nor university graduates; and it is open to any man to rise to the top in commerce or industry. Still caste remains and education is conditioned by it. The organisation varies in minor details in the different States of the empire, but the plan, the aim and the methods are virtually the same.

It is essentially a State system. The State possesses jurisdiction and exercises more or less control over all educational establishments, public and private, from the bottom to the top, because it is held to be the duty of the State to see that the national welfare is secured by the proper bringing up of the young. There is therefore central control vested in a Ministry of Education, a government department which is sometimes combined with others. The universities are immediately under the Minister, but his jurisdiction over the schools is exercised through local departments representing the government, but differing for different classes of schools. The classes of public schools are (1) elementary; (2) middle; (3) higher; and these again are subdivided. I cannot enter into any details concerning the middle and higher schools, but it must be understood that the word "public" does not carry the same meaning as in the United States' educational vocabulary. These schools are under public control and are supported from public funds; the teachers are members of the civil service of the State, but the schooling is not free; it is intended for and utilised by children in superior classes of life. Even elementary schooling is not everywhere free; it

is not in Saxony, where parents pay a small fee amounting to 5s. or 6s. in the year, but if they are totally unable to pay it may be remitted. In general they have to provide books and other things required.

Elementary education is, however, compulsory throughout Germany from six years up to an indeterminate age, which is in practice usually fourteen. Individual school liability may cease before that age, at the discretion of the district or local inspector, if the child has reached the standard deemed sufficient. All children are required to have this schooling, and if they do not receive it elsewhere to the satisfaction of the State they must go to the public elementary schools. About 95 per cent. of the children of school age are taught in these schools. That is to say, the great mass of the people receive their elementary education there.

The aim is clear, precise and practical. The function of the elementary or people's school (*Volksschule*), concisely defined, is "to train up the young in religion, good conduct and patriotism by education and teaching and to instruct them in the general knowledge and the acquirements requisite for civil life". This definition gives the key to the whole educational scheme. Character and conduct are the primary objects, then love of country, then such general knowledge as will enable the child to take its part in the ordered life of the community, whether as man or woman; and, after that, the special acquirements, including physical development. Religion, therefore, comes first, as the indispensable foundation of morality and conduct. The German people have decided that morality cannot be efficiently taught apart from religion, and, further, that religious teaching, to be effective, must be dogmatic. For this the law carefully provides. The schools are denominational

and separate for Roman Catholics and Protestants, except where there are not enough children of one confession to form a separate school; in that case they are mixed—*paritätische* or *Simultanschulen*—but the children receive religious instruction from teachers of their own confession. In 1896 there were in Prussia 680 such schools, principally in Posen and West Prussia; in a few towns all the schools are mixed. In many towns there are also separate Jewish schools, and occasionally one or two of some other sect. In all cases they are on a footing of equality before the State and the law, which ordains religious teaching but leaves the choice free. The instruction is divided into (1) biblical history; (2) catechism; the latter, of course, is dogmatic. Each has so many hours a week given to it; as a rule, three to biblical history and two to catechism. In Evangelical schools both are taught by the teachers; in Catholic schools biblical history is taught by the teachers and catechism by the clergy. I give these details, partly because they are not known out of Germany and partly because of their significance in the educational scheme, which can, I think, hardly be over-rated. Just as the Germans have known how to retain the classical element in their higher education while adding the highest developments of science and other modern studies, so have they known how to build up the most complete system of national education upon the old foundations of character and conduct. They have not flung away the old in acquiring the new, but have combined them. The retention of systematic religious teaching has a far-reaching influence on the national life, which is plainly visible in many directions, and not least in the industrial sphere. To it may be traced the sense of duty and responsibility, the respect for law, the steady effort, the self-restraint, the maintenance of a higher ideal

than the materialism of Social Democracy, which have been noted in previous chapters. And to these may be added the striking absence of corruption in public life, which is the indispensable condition for the healthy exercise of those municipal functions that are carried on upon so large a scale in German towns to the benefit of the community.

It is impossible for any student of these questions to avoid contrasting the state of things in Germany and the United States. The former is strongest precisely in those moral qualities in which the latter is conspicuously and increasingly weak, and it is also impossible not to connect the difference in some measure with the two ways of "disposing of" the religious difficulty in the schools. The one has preserved religion, the other thrown it away. I suppose no one, whether for or against, will contend that religion is of no account as a factor in school teaching. The question is generally argued on theoretical grounds; I refrain from that and say, Look on this picture and on that. It is contended by opponents of religious teaching that, in spite of it or because of it, the German people are pre-eminently given to freethinking. If this means that they are pre-eminently irreligious, I challenge the statement. The intellectual classes are pre-eminently given to speculation about everything, but to infer irreligiousness from that is a most shallow and superficial judgment. Freethinking is one of those things that make a noise out of all proportion to their size and importance. Time and again it has been supposed to be sweeping everything before it in this country and in that; but it has died away and passed into oblivion. It is difficult to gauge popular feeling about religion and easy to be misled by surface signs, which leave the great invisible bulk of waters beneath absolutely unmoved. I have already said some-

thing about this in the chapter on Trade Unions in connection with Social Democracy, and will repeat my conviction that the mass of the German people are God-fearing; nor can I help attributing it in a large measure to the maintenance of real religious teaching in the schools. In the public schools of the United States the child is taught to be its own god, and the results are becoming patent. In these last years all the world has wondered at the Japanese and their moral strength. Mr. Lafcadio Hearn has told us the secret; it lies in the maintenance or revival of their ancient religious cult, which permeates the life of the people through and through.

I have dwelt on the religious teaching at some length, because it forms the basis of the German scheme of education.

The other subjects of instruction are the German language, arithmetic, with elements of geometry drawing, history, geography, natural history and singing; also gymnastics and drill for boys and domestic handwork for girls. Great attention is paid to the language. The children are taught to speak, read and write correctly; and particular pains are devoted to secure clear enunciation and good pronunciation. Thoroughness is the great aim, quality not quantity of accomplishment. The standard of handwriting attained is remarkable. Altogether the scheme of instruction carefully avoids the ambitious and fanciful; it aims at the thorough mastery of elements rather than a smattering of extras, and as there is no competition for grants the children need not be crammed.

The teaching staff is one of the strongest points in the German system. The teachers are trained in seminaries, of which there were in Prussia 129—120 for men and nine for women—in 1901. The course there lasts three years

and is carried out in three classes, but the training really extends over six years, as the seminary is preceded by three years in preparatory institutes, which are maintained either by the State or by municipalities. In Saxony the whole six years are passed in State training colleges. Qualification for appointments is obtained by examination at the close. In addition to the systematic preparation for the career thus secured the efficiency of the teachers is promoted by their recognised position. They have the duties and rights of civil servants, and as such enjoy various privileges, including partial exemption from liability to military service and from municipal taxes, as well as an assured and sufficient income and a pension. The average annual salaries paid in Prussian schools in 1901 were—in towns, male teachers, £120; female, £80; in the country—male, £84 13s.; female, £66. The salaries of the great bulk of the urban teachers range from £75 to £180; 201 received over £255. The bulk of the rural teachers receive from £60 to £135. Three-fourths of the teachers are male.

The official position has, further, a moral value in Germany which it lacks with us. It carries with it a dignity and respect which in an educated man generate self-respect and self-confidence, the opposite of self-assertion. The German elementary school teacher has no need of self-assertion and consequently does not teach it—that bane of our elementary schools. He is somebody, has a definite social standing, though it may be humble, and takes a pride in his work. These moral factors count for more than syllabuses or examinations. The impression gained from observing class-work in operation is that the teachers are extremely well qualified for their work and take great pains with it. I am pretty certain that German children are of slow rather than quick intelligence; time and patience are

required to ground them thoroughly, and these are given. The proportion of conscripts unable to read and write is constantly diminishing. In 1900 it was only ·1 per cent. in Prussia. A very weak point is the size of the classes. The limit for single-class schools is 80, but this is sometimes exceeded. For other schools it is 70, or in some places 60. On the other hand, each class has a room to itself. In the towns the schools have mostly six or seven classes, and the average number of children in a class is about 40 or 50.

The school year begins at Easter, and varies from 40 to 46 weeks. The holidays, which occur at midsummer, Michaelmas, Christmas, Easter and Whitsuntide, take up eight weeks in the country and nine in the larger towns. They are somewhat longer in Southern than in Northern Germany. The school week ranges from 20 hours in the lowest classes to 32 in the highest. Attendance is remarkably regular and punctual, and there is very little truancy. In the upper classes boys and girls are separated as far as possible; co-education does not find favour in Germany. Corporal punishment is allowed, but teachers are directed to administer it as sparingly as possible. The law runs as follows:—

> Only after repeated and unsuccessful application of one of the former punishments (reprimand, standing out, detention after school, etc.) or on account of flagrant disobedience or gross misconduct, is a moderate corporal chastisement permitted, but always in a measured form and so as not to be injurious to health. The corporal punishment of girls is to be avoided to the utmost.

The school buildings are regulated by law with respect to height of rooms, cubic space, and other matters. Great attention is paid to ventilation, warming and light, and in these respects the newer schools, in towns at least, are excellent. I have previously noted the value attached to good lighting in factories; it is the same in the schools. The Germans appear to me to have realised more than

most people the very simple facts that a bad light spoils the eyesight by straining accommodation, and that a good one greatly increases efficiency by diminishing the expenditure of nerve energy on mere perception and consequently releasing it for other work. I have not seen a large number of spectacled children. So far as one can make a general statement from a limited field of observation, I should say the school buildings are plain and unpretending, but adequate and well adapted to their purpose.

Administration is a little complicated. I have already explained the central control, which is exercised over elementary schools through the provincial government. The important executive officer is the district inspector, who corresponds in many respects to the superintendent in the United States, with this important difference, that he is a Government official. His functions are more than supervisory; he wields authority over the internal management of the schools in his district, the teaching, discipline, and so on. Under him is a local inspector for each community in the district, who acts as chairman of the school committee representing the local authority. The constitution of the latter varies, but in towns it is generally the municipal authority. The cost is chiefly borne by the community out of local taxes, with subsidies from the State; the share of the latter is shown with other details in the following table.

Statistics of Elementary Schools in Germany, 1901 (about).

Public schools	59,348
Teachers, male	124,027
Teachers, female	22,513
Children enrolled	8,924,779
Total expenditure	£20,954,600
State contribution	£6,033,650
Expenditure per scholar	£2 7s.
Private elementary schools	643
Children enrolled	41,328

But the account of German elementary schooling does not finish with the *Volksschulen*. There is no provision for free higher grade schooling, no "equality of opportunity"; but the education of the masses does not end at this point. There are continuation schools, of which some account must be given.

At fourteen the children leave the elementary school after eight years' schooling, divided into three grades, and begin to earn their living. Some, indeed, do that earlier. I have already mentioned that in 1901 there were 9,454 children under fourteen employed in *Fabriken*; and a very large number, sometimes at quite an early age, are further employed at home or in business other than *Fabriken*. A law was passed in 1903 regulating both these classes of employment. Broadly, however, the normal course is for boys and girls to go to school till fourteen and then to work either at home, helping their parents, or in business. In trades where apprenticeship obtains boys are apprenticed; in others boys and girls are taken on at a low wage—say, 2s. 6d. a week—and work their way up as they grow and acquire the skill. They learn their trade in the place where it is carried on, which is the only place where it is or can be properly learnt. But in order to prevent their forgetting all they have learnt in school, which they readily do, and to promote their mental development in the same direction, continuation schools have been established, where they get a few hours' instruction in the week from fourteen to sixteen, seventeen or eighteen years of age. There is no uniformity about these schools, which have been developed out of voluntary efforts; they are different in towns and on the land, different for boys and girls, and different again in different States, being compulsory in some and not in others. I confine myself to those

bearing upon industrial life. In Saxony and some other States continuation schools are compulsory throughout the State for boys from fourteen to seventeen; in Prussia they are optional; that is to say, local authorities have power to establish them and make them compulsory. The use of this power is gradually extending; at present the schools are most developed in Nassau. The boys attending them are mostly learning or exercising a trade, whether a handicraft or work in shops or factories. The object kept in view in the schools is twofold: (1) to continue their general mental development, (2) to help them to become efficient in their trade.

As Düsseldorf is one of the latest towns to adopt these schools, it may be taken to illustrate their aims and character according to the most recent ideas. The bye-law establishing the schools and authorised on 10th December, 1901, provides that all apprentices and youthful workers engaged in every sort of trade, including commercial business, in the town are bound to attend the continuation classes on the days and hours appointed until the end of the school half-year in which they complete their sixteenth year. If they fail to reach the standard required, the liability may be prolonged for another half or full year. Only those are exempted who can produce evidence to the satisfaction of the school committee that they possess the knowledge and acquirements which it is the aim of the school to impart. Youthful workers, apprentices, etc., who have passed the school age may be admitted as voluntary pupils on payment of the school fee, with the consent of the committee. Employers are bound to contribute 1s. 6d. quarterly for each scholar employed by them of school age; voluntary scholars pay the same. Scholars are bound to attend regularly and keep the rules, under a penalty of 20s., or three days im-

prisonment. The latter has been applied in two or three cases. Parents and guardians are bound not to keep boys from coming, and employers are bound to let them leave off work in good time to attend school; both under the same penalty as above.

There are, therefore, both compulsory and voluntary classes, and to these must be added a third branch—namely, drawing classes for boys, which are also voluntary. The compulsory classes are the most important. In their arrangement the calling of the pupils is the guiding principle. They are held in the elementary schools. The hours are in all cases six a week—namely, from 5 to 8 p.m. twice a week, except for the barbers and bakers, whose hours are 2 to 5 p.m. No compulsory classes are held on Saturday. The voluntary classes are held on Sunday morning, 9.30 to 12.30, or in the evening, 7 to 9, on one or two days in the week. The subjects of instruction are drawing, arithmetic, reading, composition, book-keeping, knowledge of social legislation, and other matters bearing on the rights and duties of the lads as members of the community. For instance, they are instructed in the labour laws, the legal relations of employers and employed, workmen's insurance, the object of tariffs, taxation and similar matters. Arithmetic and reading are carried beyond the *Volksschule* limit, and essays are set in such subjects as those mentioned. But the chief energy of the *Fortbildungs-schule* is expended on drawing, which is taught in the most methodical manner and on a carefully devised system. The principle is, while training the hand and eye, to make the exercise bear specifically upon the trade in which the pupil is engaged; and great ingenuity is expended on adapting the lessons accordingly. The lads have to come clean, and particularly with clean hands, which has a good disciplinary effect.

The German continuation schools are for the most part administered and maintained by the municipality under Government supervision and with the aid of a grant. They also receive in many cases substantial support from employers, who have also founded and maintained such schools, where they did not otherwise exist, on their own initiative. Other employers, again, where there are none, insist that their apprentices shall attend neighbouring schools. A special class of continuation schools called "work-schools" is maintained in the State mining district of the Saar, and the miners of the Ruhr coalfields have a number of their own.

With regard to girls, they are taught sewing and other hand-work up to fourteen in the *Volksschulen*. Afterwards, those who stop at home and help their mothers have an opportunity of learning and practising all kinds of housework; but in an industrial country, such as Germany has become, a great many begin to earn their living at once in factories and shops. They are apt to forget what little they have learnt and to acquire no further domestic accomplishments until they marry and enter the school of experience unprepared. This defect is to some slight extent, but in no uniform manner, remedied by domestic schools, of which there were, in the year 1897, 163 with 9,689 scholars. Only twelve of them were established by municipal or other local authorities; the great majority are carried on by religious bodies or by employers of labour. A few are of ancient foundation, but, as a whole, these schools are the creation of the last few years, and may be regarded as a beginning. The subjects of study are cooking, sewing, knitting, ironing and other household occupations. In these respects, the education of girls belonging to the middle and upper classes is far better provided for than that of the lower classes, although the latter have more need of it.

There remains one truly educational factor in the life of the workman, though it is not usually regarded in that light. At twenty all male German subjects, with some trifling exceptions, are liable to service with the colours for two years in the infantry or three years in the cavalry. It is reduced to one year in the case of elementary school teachers and candidates for the post, and to one year's voluntary service for those who have reached a certain standard of higher education, or who pass the required examination. Practically the able-bodied male population passes through the ranks at the age 20-22. The liability comes just when a lad has learned his trade and undoubtedly forms a break in his civil career; but I have met with no two opinions about its educational value to the individual and its industrial value to the nation. Perhaps the most striking effect is the physical benefit derived from the exercises, drill, gymnastics and regular life. It turns a weedy anæmic lad into a well-knit upstanding young man with sound organs and well-developed limbs. It further teaches him cleanliness, discipline, order, authority, self-respect and respect for others. The effect in the workshop is visible at every turn. It is not too much to say that military service has been in a great measure the making of industrial Germany. Employers and employed have gone through it together; they have learned in the same school, and they equally understand that order is essential to every organised force, industrial as well as military. Recent revelations have shown that military service has a dark side, like most other things, and its abuses are a deep disgrace to Germany; but they do not invalidate its good effects.

Regarded as a whole, the German national system of education does its work very well. The aim is not so lofty as the American one, but it is much more effectually carried

out. The worst side of it is the failure to stimulate individuality and the reduction of all minds to a common mould. There is too much subordination. Germans lack initiative, they lean too much on authority, and are too helpless without it. Both the educational and the military systems have that effect. It is possible to have too much of any virtue, and order may become a weakness if not a vice.

England.

The past of English public education presents a somewhat sorry spectacle compared with American or German; it has had neither the inspiring idea of the one, nor the methodical completeness of the other, and it cannot be doubted that the country has suffered in comparison. I have already referred to the peculiar position, and to the great change which has recently taken place; but this very change makes it difficult to deal with the subject on the same footing as the other two. It seems waste of time to explain a system or want of system which has ceased to exist; and on the other hand, the new system is too young to have any bearing on existing conditions which are the result of the old. I will therefore confine myself to the main points.

In 1870 schooling was neither free nor compulsory.[1] There were then 8,281 "voluntary" schools, carried on by religious bodies with State aid (dating from 1833), and having accommodation for rather less than 2,000,000 scholars. At that time Germany had long had a full national system, and there were 7,500,000 scholars in the common schools of the United States. But the contrast is

[1] The juxtaposition of these words, which have an almost technical meaning, is awkward and may confuse foreign readers; "free" means gratuitous.

not all to the discredit of England, for if it shows the indifference of the British public it also discloses a faithfulness to duty and a liberality of endowment on the part of the churches (which were the Church of England, the Roman Catholic Church and the Wesleyan Methodist Church) not to be found elsewhere. It should not be forgotten that they bore a burden which the community assumed elsewhere; and they continued to bear a large part of it. In 1870 public schools were created, to be provided and maintained by the local community with State subsidies, and administered by popularly elected boards. Thenceforward the two classes of schools—voluntary and board—were carried on together. The great difference in their position was that the latter could command the rates. With regard to teaching, the voluntary schools of course made a cardinal point of dogmatic religious teaching according to their own tenets, while for the board schools, after a fierce controversy, an unsectarian form of bible teaching was settled by law. There was, however, no definite educational aim in view, and if there were it soon dropped out of sight in the rivalry between the two sets of schools and in the efforts necessary to earn the Government subsidy. The conditions under which the grant was made turned it into the chief object of school administration. And in addition to this unfortunate feature the school boards had to create their teaching staffs, which consisted consequently of untrained persons. Twenty years after its establishment I asked some leading members of the London School Board: "Are your teachers educated?" and they unanimously answered "No". Moreover, in some localities, of which London was a conspicuous example, education became the plaything of party politics, which is the most fatal thing that can happen to any institution.

Nevertheless, in spite of all these drawbacks, much zealous and faithful work was done in the next thirty years, during which both classes of schools increased steadily, but the board schools gradually overtook the voluntary ones. In 1876 school attendance was made compulsory, a provision which was and still is deeply resented by a large section of working-class parents. No age was laid down, but parents had to see that their children received "efficient elementary instruction in reading, writing and arithmetic," and persons were forbidden to employ any child under ten years old or over ten unless it had obtained a school certificate. In 1891 elementary schooling was made practically free. The following international distinction is, therefore, to be noted. In England elementary education is uniformly free and compulsory; in Germany it is uniformly compulsory but not free; in the United States it is uniformly free, but not compulsory. In 1899 the central educational authority, which had been a department of the Privy Council since 1865, was raised to an independent position and made a Government Board of Education. And in the same year the age of compulsory school attendance which had been fixed at eleven in 1893, was raised to twelve.

Concurrently with these legal changes a great development had taken place. Between 1870 and 1900 the number of voluntary schools increased from 8,281 to 14,409 and 5,691 board schools were established. The accommodation increased from 1,878,584 to 6,509,611, and the number of children on the register from 1,693,059 to 5,686,114, ranging from three to fifteen years of age; and the number of teachers from 28,341 to 145,944. The curriculum was gradually enlarged and extended, evening continuation schools, special schools for blind, deaf and defective chil-

dren and a few higher grade schools were established; but the last were subsequently pronounced illegal, and taken over by the local municipal authorities. The English evening continuation schools are highly appreciated in Germany. I found that Dr. Kuypers, the Düsseldorf district inspector, before establishing the evening schools which I have described above, had visited England to study the voluntary evening schools, and he was full of admiration for them, especially for those of the London School Board. He gave effect to his opinions by imitating several features in organising the Düsseldorf schools. Honour to whom honour is due. The English infant schools are also remarkable. Further, between 8,000 and 9,000 school libraries have been established and nearly 7,000 savings banks.

This is not a bad record in the circumstances; it represents a great growth of interest, much steadfast labour and faithful personal service. In many localities the dual system worked quite harmoniously and the schools maintained a good standard of efficiency. The voluntary schools naturally had the greater struggle because they had not the rates to draw upon, but they trained their teachers better and were certainly not the less efficient of the two in results. The officers of the London County Council, which is anything but friendly to them, paid a high tribute, on taking them over in 1905, to the standard maintained in many of those in London, and particularly to the moral hold of the teachers over the children. In other towns they were still more successful, and gave such general satisfaction that few board schools were found necessary. I have given the relative figures for the towns described in Chapter II. and called attention to the great preponderance of the voluntary schools in the industrial towns of Lancashire. The fact

indicates a living interest in education on the part of at least a considerable section of the population. It is one thing to support schools through the local or State taxes, which cannot be evaded and are demanded *en bloc*, and quite another to put your hand in your pocket and give a voluntary subscription for a specific purpose.

But in spite of some good features elementary education has certainly been a failure in England. The country has steadily declined in vitality since 1876, when the compulsory law may be said to have inaugurated a national system. That is not due to education, but education has not prevented it. There has been something essentially wrong about it. The children have been taught to read and write, but their taste is deplorable and their speech incredibly bad. Country dialects have been modified, but their broad, strong and expressive inflections have given place to a hideous bastard lingo made up of mincing affectation and slovenly enunciation. It is most conspicuous in London but spreads over an ever-increasing area, and forms part of the conventional stock-in-trade of every slum novelist. This speech is new and it is taught. My own belief is that it has arisen from the efforts of public school teachers to speak in an elegant manner. The most prominent sound is the pronunciation of "a" like "i". Two years ago a newspaper boy in a station not far from London came past the railway carriage calling "Piper!" as usual. I stopped him and said, "Why do you say piper? How do you spell it?" He spelt it. "Very well, p a is pā; p i is pi." From that day till now not only that boy but all the other boys in that station have ceased to call "Piper!" I conclude that it is either taught or not corrected in school. With this pronunciation has also come the extended use of foul and filthy language

to which I alluded in Chapter I. It is accompanied by an uncouth demeanour and unruly behaviour. Parents universally complain of the increasingly turbulent, insubordinate and unmanageable conduct of the children, and it is patent to every one. The only visible result of the general accomplishment of reading is the output of an immeasurable amount of printed rubbish. Three or four firms alone turn out daily and weekly publications in millions of copies and hundreds of tons—all rubbish. The best thing to be said for it is that the rubbish is not offensive; it is chopped straw and syrup, not putrefying offal. It is accompanied and sustained by an ever-increasing flood of quack advertisements—drugs, foods and beautifiers—appealing to the ignorance that has learnt to read. Then children are taught to sing; and, as I have already said, the only audible result is that throughout the length and breadth of the land, from the metropolis to the remotest village, they bawl the silly jingle or mawkish sing-song of the music halls.

These are not the only results of popular schooling, but they are the most prominent. And can any one maintain with even a show of plausibility that the physical, intellectual and moral standard of the people has improved in the last twenty-five years? What sign is there of higher motives or increased capacity in any direction?

The chief defects seem to have been (1) lack of a defined purpose or guiding principle, (2) misdirected efforts caused by the conditions attaching to the State grant, (3) inadequate training of teachers. The last is of the utmost importance, for teaching is a personal matter, and the teachers are more than methods, systems or syllabuses. According to the last published statistics (1902-03),[1] there were 162,126 teachers, of whom 124,186, or more than

[1] *Statistics of Public Elementary Schools*, 1902-03, Cd. 2,000, p. 12.

three-fourths were female, a much greater disparity than in the United States, but due in a large measure to the infant schools. Of the whole number only 70,886 or considerably less than half were certificated, and of these nearly 31,000 were untrained. The trained teachers numbered 39,904, or about one-fourth, and the period of training was:—three years, 520; two years, 39,384. There were 24,438 pupil teachers, 7,833 "candidates admitted as teachers," and 2,878 "probationers". If this list be compared with the German professional corps it looks positively farcical. And the wastage is enormous. I put some recent figures[1] in a tabular form:—

	1903.	
	Output.	Wastage.
Trained masters	1,010	509
Trained mistresses	1,698	947
Certificated masters	417	164
Certificated mistresses . . .	2,779	1,126
	5,904	2,746

The salaries of 68,306 certificated teachers are given. They range from under £50 (1,074) to over £500 (two between £500 and £600, one £700). The mean for masters was £131 13s., and for mistresses £87 11s. 3d. Of the masters, 28·2 per cent. received over £150, and of the mistresses 27 per cent. received over £100. I am not able to compare these salaries with German or American ones, because they only include the better-paid teachers, forming considerably less than one half the whole staff; but so far as it is possible to form an idea they seem to be comparatively liberal, and decidedly so in the higher ranks of the service. There were 1,146 masters and 159 mistresses receiving over £250 a year. In Prussia, only 270 masters

[1] Sir F. D. Powell, *Royal Statistical Society*, 15th Nov., 1904.

and no mistresses were in this scale in 1901, and none of them enjoyed anything like the highest salaries paid in England.

There seems to be something wrong about the English scale; it looks as if the lower ranks were starved to provide lavish pay at the top. However that may be, elementary teaching is certainly not a profession. Perhaps a reason more potent than the pay-roll is the lack of social standing attaching to the career. This is very galling to an ambitious and clever man, who is acutely conscious of a position below his abilities. University men, to whom the elementary school offers better pecuniary prospects than a curacy or an undermastership in a private school, have fought shy of it for this reason. The dissatisfaction has been greatly enhanced by the hopeless character of many school boards. It is intolerable to a fairly educated man, who has (as many have) a good conceit of himself, to be either patronised or snubbed by vulgar placemen who can barely read or write and cannot pronounce a single word in the language properly, merely because they have for reasons of their own made themselves agreeable to a certain number of equally ignorant electors. The gross and shameless unfitness of many members of the boards has cast a blight over the whole field. The galling position of the teachers has fostered the Bradley Headstone spirit in men already inclined to be morbidly self-conscious; and it is a very baneful spirit in the school, because it not only finds vent in self-assertion but imparts the same diseased and sour view of life to the children.

But much of this is now of the past. By the Act of 1902, extended to London in 1903, the school boards were abolished, and the local administration of public elementary education was placed in the hands of the county councils

and county borough councils. By this step a simple and uniform framework of central and local control has been established, not only for elementary but also for higher, including technical, public education ; and the basis has been laid of a real system, more homogeneous than that existing anywhere else. It abolishes the division of authority and permits the co-ordination of the several grades of education with singular completeness. At the same time the conditions under which the State grant is given have been amended, the provision for training teachers has been improved, and the aim of elementary education has been admirably defined. The guiding principles are laid down so well that I quote them in full from the code of regulations issued by the Board of Education in 1904.

The purpose of the Public Elementary School is to form and strengthen the character and to develop the intelligence of the children entrusted to it, and to make the best use of the school years available, in assisting both girls and boys, according to their different needs, to fit themselves, practically as well as intellectually, for the work of life.

With this purpose in view it will be the aim of the School to train the children carefully in habits of observation and clear reasoning, so that they may gain an intelligent acquaintance with some of the facts and laws of nature; to arouse in them a living interest in the ideals and achievements of mankind, and to bring them to some familiarity with the literature and history of their own country; to give them some power over language as an instrument of thought and expression, and, while making them conscious of the limitations of their knowledge, to develop in them such a taste for good reading and thoughtful study as will enable them to increase that knowledge in after years by their own efforts.

The School must at the same time encourage to the utmost the children's natural activities of hand and eye by suitable forms of practical work and manual instruction ; and afford them every opportunity for the healthy development of their bodies, not only by training them in appropriate physical exercises and encouraging them in organised games, but also by instructing them in the working of some of the simpler laws of health.

It will be an important though subsidiary object of the School to discover individual children who show promise of exceptional capacity, and to develop their special gifts (so far as this can be done without sacrificing the interests of the majority of the children), so that they may be qualified to pass at the proper age into Secondary Schools, and be able to derive the maximum of benefit from the education there offered them.

And, though their opportunities are but brief, the teachers can yet do much to lay the foundations of conduct. They can endeavour, by example and influence, aided by the sense of discipline which should pervade the School, to implant in the children habits of industry, self-control and courageous perseverance in the face of difficulties; they can teach them to reverence what is noble, to be ready for self-sacrifice and to strive their utmost after purity and truth; they can foster a strong respect for duty and that consideration and respect for others which must be the foundation of unselfishness and the true basis of all good manners; while the corporate life of the School, especially in the playground, should develop that instinct for fair-play and for loyalty to one another which is the germ of a wider sense of honour in later life.

In all these endeavours the School should enlist, as far as possible, the interest and co-operation of the parents and the home in an united effort to enable the children not merely to reach their full development as individuals, but also to become upright and useful members of the community in which they live, and worthy sons and daughters of the country to which they belong.

Here are combined the best elements of both the German and the American principles, and the way is pointed to a much nearer realisation of the true ideal than either. The functions of the elementary school are stated with the utmost clearness in the order of their importance, the methods of fulfilling them are indicated, and the way in which "equality of opportunity" can best be realised—namely, in the selection of those best fitted to profit by higher education—is pointed out.

It is nothing short of a thorough reformation of method, which may be turned into a reformation of practice in a few years. Unfortunately, a legacy is left from the old order, which has already caused great trouble and threatens more. It is the double set of schools which has let in the "religious difficulty". Although the board schools gained steadily on the voluntary ones in the number of scholars, they still did not educate half the children in 1902. The average number of the scholars in that year was:—voluntary schools, 3,092,159; board schools, 2,875,709. The former were thus distributed: Church of England, 2,333,587;

Roman Catholic, 337,596; Wesleyan, 157,403; "British" and others, 263,573. These schools were owned by the several bodies, which exercised full control over them, subject to the jurisdiction of the State department. The buildings have now been handed over to the use of the new authority, but the cost of maintenance, and any repairs or improvements which may be required, is still imposed on the former owners. In return they are allowed certain privileges in the management. They may appoint four out of six managers, whereas for the other schools all the managers are appointed by the local authority. In this way the religious bodies are able to secure denominational religious teaching by teachers selected by themselves. In this connection it should be noted that nearly all the training establishments were founded and conducted by them; out of forty-seven residential colleges only two were undenominational.

In localities where concern for education is greater than sectarian animosity this disposition has caused no trouble, and the new educational system has begun to work well. But in some places all the worst passions concealed beneath religious zeal have been let loose and have joined hands with party politics to arouse an acute controversy. No looker-on can see any difficulty in arranging that children shall have whatever religious teaching the parents desire, and many feasible plans have been suggested, but as yet to no purpose. The battle of the sects goes on. Before the English people let it end in the abandonment of religious teaching, which is threatened, they will do well to study carefully the object lessons presented by Germany and the United States. There are two ways of disposing of the religious difficulty; one is to dispose of religion, the other to live and let live.

CHAPTER XVII.

TECHNICAL EDUCATION.

THE word "technical" is very elastic. From a perusal of prospectuses issued by various technical institutions, I gather that it covers all industries, trades and crafts, from cooking to ship-building, and from sick-nursing to pig-keeping, nearly all the arts, most of the sciences, several other branches of learning, such as history, political economy, literature and languages—in short, everything that can be learnt except elementary reading and writing at one end of the educational scale, and the old university and professional studies at the other end. No definition will cover the whole of this field, which extends far beyond that which is "useful," or directly preparatory to earning a livelihood. Nor is it possible to classify all the institutions which come under the head of "technical". Their development in a comparatively short time—for the most part within twenty years, and almost entirely within forty—is a very remarkable fact; it testifies to a belief in schooling which verges on the superstitious, and there are already signs that the thing has become a fetish to many.

It follows from the multiplicity and diversity of studies included that the subject of "technical education" is in a state of confusion. That applies to every country in some degree, but not equally. In England and America the confusion is chaotic, in Germany much less so, though this branch of education has not the same clearness of aim and

organisation as elementary and secondary education. It cannot have quite the same clearness, because the purpose of specialised education is necessarily far more diversified than that of general education, but the well defined organisation of the latter in Germany has provided a better basis for the super-position of specialised studies than the comparatively unsystematised scheme in America or the total absence of system in England. I will, therefore, take Germany first.

Germany.

The previous chapter dealt with the elementary school system (including higher elementary and continuation schools) of Germany, and I will here add a short account of the higher schools, which is indispensable to a clear comprehension of the subject. There are for boys three types, differentiated by the courses of study, and two grades of each, distinguished by the length of the course, which is six years (nine to fifteen) in the lower grade, and nine years (nine to eighteen) in the higher. Thus there are six classes of higher school in all, namely (1) *Gymnasium*, full classical (Latin, Greek, French *or* English, history, etc.); (2) *Realgymnasium*, half classical, half "modern" (Latin, French, English, mathematics, etc.); (3) *Oberrealschule*, "modern" (science, modern languages, no classics); all these for nine years: then the three corresponding lower grades for six years, (4) *Progymnasium;* (5) *Realprogymnasium;* (6) *Realschule*.[1] The higher girls' schools are quite distinct; girls are taken up to fifteen or sixteen and learn two modern languages. It is at once apparent that

[1] The respective numbers in Prussia in 1901 were: *Gymnasien*, 285; *Realgymnasien*, 70; *Oberrealschulen*, 32; *Progymnasien*, 50; *Realprogymnasien*, 40; *Realschulen*, 113. Of course, all these types do not exist everywhere; the provision varies according to local requirements.

the higher schools are thus differentiated with a definite view to preparation for different careers in life; and that is, in fact, the case. The choice is made early in life, and the schooling adjusted to it; the successful completion of a particular course is the avenue to a particular position. For instance, the full *gymnasium* course alone entitles to the full university curriculum, and thence to the higher professional and official careers; the *Realgymnasium* and *Oberrealschule* are the avenues to a limited choice of university studies with corresponding professions to follow; the lower grade or incomplete courses have a still more limited outlook.

It is difficult for an Englishman or an American, accustomed to the go-as-you-please method or want of method at home, to realise how cut-and-dried, how precisely ordered and how *official* the whole thing is in Germany, and how great the importance attached to these distinctions. Broadly speaking, in England and America a man is judged by what he is rather than by his academic record or his official or social position. He is, for example, a gentleman or not, capable or not; and if the verdict on a man in a high position is Not, then so much the worse for his position which is brought into contempt. That independence of judgment is still more thorough in this country than in the United States, where wealth and titles at least are notoriously paid a public homage which has but a pallid reflex here.[1] In

[1] It is a great mistake to attribute servility even to the peasantry in England. They are cool and critical judges of conduct; they hold that *noblesse oblige* and heartily despise those who possess wealth or station and fail to live up to their responsibilities. The House of Commons has been brought into general contempt of late years by the conduct of members, sunk in party strife, devoid of dignity, capacity or serious purpose; membership commands no respect, but rather the contrary. The Royal Family, on the other hand, have won immense esteem and popularity by performing the duties of their stations in the most conscientious and admirable manner.

Germany official standing imposes and academic standing commands respect of themselves, apart from the individual. There is both strength and weakness in this. It is better than worshipping wealth, and I have shown what a valuable influence it exercises on the teaching profession; but it also stifles and oppresses. Whatever its effect, it cannot be transplanted, and while we admire the ordered method of German education, we must remember the entirely different habit of thought and social conduct with which it is inextricably entwined.

Technical education is moulded by the same influences. When a thing becomes important in Germany it is academised, so to speak, and given official standing. Industry and commerce have followed science in acquiring academic rank alongside the older learned studies. Hence the technical high schools and the still later commercial high school. With the latter I am not concerned. The *Technische Hochschule* is a university of industrial science, having the same standing as the older universities but without the corporate university life. It stands at the head of the technical education scheme and grants degrees—Doctor of Engineering; but it does not bear the same relation to the lower technical school that the university does to the *Gymnasia* and the other institutions just described. That is to say, pupils do not go up to the *Technische Hochschule* from the lower technical schools. They go up to it from the secondary schools—the *Gymnasia*, the *Realgymnasia* and the *Oberrealschulen*—as to the university. It is strictly an alternative university, and it demands the same high standard of previous general education as a condition of entrance.

The organisation of technical education, therefore, is not parallel with that of secondary education; but it follows similar lines of cleavage. As there are several well-defined

types of secondary school, leading to different spheres in life, so there are several types, though less well defined, of technical schools leading to different planes in the industrial world. Yet it is difficult to classify them in a way that is at once correct and clear. Roughly, however, they may be divided into three groups—(1) lower, (2) middle, (3) higher. If the reader will turn to the account of Chemnitz given in Vol. I., p. 239, he will there find examples of different forms of lower and middle technical schools and will gain some idea of their differentiation.

(1) The lower group includes artisan (*Handwerker*) and specialised trade schools (*Fachschulen*) for apprentices, co-ordinate with the evening continuation schools and alternative to them; attendance at a trade school excuses from the other. These trade schools are for the most part conducted by the guilds, which have recently been revived with well-defined powers and charged with the maintenance of the apprenticeship system. There are also in some places apprenticeship workshops in addition. All these things have an important influence on the general industrial efficiency of the nation; but they chiefly concern the small handicrafts and have very little bearing on the large manufacturing industries, with the possible exception of weaving. They are particularly numerous in Saxony and some parts of Prussia, especially Berlin; but they are not uniformly distributed and vary much in character and organisation.

(2) The middle group includes several types, three of which are illustrated in the account given of Chemnitz. The Royal Academy and Technical Institutes and the Weaving School described in that town belong to the middle group. I have said above that the Akademie is in the nature of a technical high school and virtually it is so, but it has

not that official status and must be counted in the middle group. It really stands between the technical high school and the superior trade school. The following account of the origin and purpose of the schools kindly given me by Professor Fehse, helps to make the subject clear :—

"Thirty years ago or more there sprang into existence a kind of schools calculated to give a theoretical instruction to young men going in for a trade or an industry. These schools were called *Gewerbe-schulen.* The diversity of trades caused a splitting into branches; hence—engineering school, dyeing school, trade drawing school, soap-boiling school, milling school, building school, the last working only in the winter terms, their pupils, aiming at becoming master builders, being employed practically in summer. You are quite right in presuming that these branches are the same as the *Fachschulen* in Prussia. In Chemnitz they are crowded into one house, under one head, forming altogether the *Technische Staatslehranstalten.* Conditions of admission are the certificate of a *Volksschule* and some years or terms of apprenticeship in a trade. In the course of time a higher degree of *Fachschule* has been organised and added to the *Technische Staatslehranstalten* for young men who have attended a secondary school and obtained the certificate entitling them to one year's voluntary service. The curriculum takes up seven half-yearly terms, at the end of which time the men who pass their examination get the diploma of an engineer. This school has three different branches: machinery, architecture, chemistry."

Corresponding with these two institutions are two textile schools, a higher and a lower. The first is of the same type as those described in the other textile towns on my list. They are all high specialised, and that is the rule with trade schools in Germany. The "crowding into one

house" of which Professor Fehse speaks, is exceptional. These middle technical schools, as I have called them, are generally single institutions representing not only particular lines of industry, but also particular branches in those lines; in the textiles, for instance, cotton (M. Gladbach), wool (Aachen), silk (Crefeld), drapery (Barmen). Similarly with different branches of engineering, small metal trades, pottery, building. And such specialised schools are placed in centres, where those industries are carried on, as in the cases just mentioned. Other examples are Iserlohn (bronze), Remscheid (small iron), furnishing textiles (Plauen), engineering (Hagen), engineering, smelting and rolling (Duisburg).

These are essentially the schools that provide technical instruction for the large manufacturing industries, and they are of great importance. They are not all of the same grade, but may be roughly divided into higher and lower, corresponding to the two sets of schools at Chemnitz explained by Professor Fehse. The lower ones are sometimes called "foremen's" schools, but besides foremen heads of establishments, draughtsmen and other experts acquire their scientific training here. The higher ones give more advanced and specialised teaching to persons of superior education; but there is no clear line of demarcation.

Another type of the middle technical group, which ought to be mentioned, is the art trade (*Kunstgewerbe*) school. There is one of these at Düsseldorf and it is mentioned in my account of that town.

(3) The third group is formed by the technical high schools, already mentioned. Of these Germany has ten, situated at Berlin (Charlottenburg), Munich, Dresden, Stuttgart, Brunswick, Carlsruhe, Darmstadt, Aachen, Hanover and Danzig. They have no uniform curriculum, but all of

them teach architecture, civil and mechanical engineering, chemistry, mathematics and physical science. Special subjects are naval architecture (Berlin and Danzig), mining (Aachen), forestry (Stuttgart), agriculture (Munich), and so on. There are also two high schools of mining, at Freiberg in Saxony and Klausthal, and a mining school at Berlin in connection with the *Technische Hochschule.*

I do not think it necessary to give details about the organisation of German technical schools, as they have been so very fully treated in a series of consular reports by Dr. Rose, lately British consul at Stuttgart;[1] but I have some general remarks to make. The three groups into which I have divided them are broadly intended for three classes of persons engaged in industrial occupations: (1) workmen, (2) manufacturers and their ordinary staff, (3) high scientific experts; but there is no precise line of demarcation between (1) and (2) or between (2) and (3). Provision is made for workmen in the middle group by means of evening and Sunday classes, and a man of superior education intending to be an expert might choose a middle school instead of a high school. In some industries he would do so as a matter of course. The classification is therefore somewhat rough.

We may put the matter in another way and make a division by reference to day and evening classes thus:

(1) Lower group . . .	All Evening Classes (or Sundays).
(2) Middle group . . .	Day and Evening Classes.
(3) Higher group . . .	All Day Classes.

From the point of view with which I am concerned, groups (2) and (3), which cater for the great industries, are the important ones; and what they supply is highly educated heads, managers, superintendents and experts. I have often

[1] See also the Seventeenth Annual Report of the Commissioner of Labour, U.S.A.

seen technical education in Germany referred to by English writers and speakers on account of its value in producing skilled workmen. That is a double delusion. Skilled workmen are not produced by technical schools anywhere, except perhaps in the artistic handicrafts; industrial skill is acquired in the workshop and the mill. Nor are German workmen more skilled than British; in some great industries, and particularly cotton spinning, they are conspicuously and admittedly less so. But more than that. So far as the large manufacturing industries are concerned —and they are the ones in point when we are speaking of international competition—the German technical schools have generally but little to do with workmen. I have said that the middle group have some evening classes for workmen, but the number of pupils attending them is comparatively small. In the large technical institute at Chemnitz out of 1,031 pupils in 1900, only 50 were attending the evening classes; at the engineering school at Duisburg which is of the lower grade, only thirty-four workmen graduated in fifteen years; at the textile schools enumerated by Dr. Rose the highest number of evening pupils in 1901 was 172 at Barmen. Such figures as these sink into insignificance compared with those of the English technical schools, at which the evening pupils studying the great industries are numbered in hundreds and sometimes in thousands.

I repeat, therefore, that the services rendered to the competing industries by technical schools in Germany lie in the training of the officers, not of the rank and file. And the branches of such industries chiefly affected are: chemistry, electricity and ship-building by the technical high schools:[1]

[1] It should not be forgotten that chemistry and electricity are also taught at the universities, but with a less directly industrial purpose in view.

textiles, mechanical engineering and machinery by the middle schools. Of these chemistry has the widest importance, because it enters into everything and its range is constantly extending. The manufacture of chemicals alone has become one of Germany's greatest assets, valued at fifty millions sterling a year; but the secondary applications of that science are still more important, including metallurgy, dyeing, the properties and uses of fibres, oils, and, in short, all raw materials. These studies are carried to the furthest limits of theoretical knowledge in the technical high schools with a direct view to industrial application. Electrical engineering comes next in importance; the foremost position occupied by Germany in this modern and illimitable field is due to technical training not less than to the genius of Siemens. The middle schools exercise their most important influence in textiles and in mechanical engineering. They are more practical and less purely scientific than the high schools. With regard to mechanical engineering the opinion I have found prevailing among manufacturers and engineers is that the high school course is too long and theoretical and rather unfits men for ordinary mechanical engineering. Employers bringing up their sons to the business prefer to send them to the middle schools; it is these that chiefly supply the workshops, not "Charlottenburg," as some people erroneously suppose in England, where that blessed word has become a regular Abracadabra. It was stated by the Association of German Engineers in 1901 that out of 3,281 employed by 105 of the most prominent works in Germany two-thirds came from the middle schools. In the textile industries designing and dyeing are the spheres which owe most to the schools. A noteworthy feature of technical training in Germany, which cannot be too strongly emphasised, is that it is not regarded as a substitute for the

workshop or the mill. On the contrary, the rule both in high and middle schools is to insist on previous practical experience, which may vary from one to four years.

England.

I pass on to England, and in doing so I wish to say with all possible emphasis that in no subject connected with this inquiry have I met with so much misapprehension or so much unjust depreciation of native institutions. No doubt that is largely owing to the fact that technical education in its modern form is a comparatively new thing in England, being but little more than twenty years old, and the impression of backwardness has remained when it is no longer deserved. The rapid development that has taken place within the last ten or fifteen years is all the more remarkable, and a sign of energy full of meaning to those who can read signs. I should hesitate to say that the provision in England to-day is superior to that of Germany on the whole, but in some respects it certainly is. The two are, however, so different that comparison halts. There is a fundamental difference which can be put in this way. In Germany, as I have endeavoured to show, the technical schools supply the large industries mainly from above; they train men who have previously had a superior general education as heads, officials and experts.[1] In Eng-

[1] The proportion of men going in for industrial science who have taken the classical school course instead of the "modern" is very striking. Out of 2,736 students at the Prussian high schools in 1899, the distribution was: from *Gymnasia*, 1,406; from *Realgymnasia*, 1,065; from upper *Real* (modern) schools, 265; and of the candidates at a recent examination for the position of State engineer the proportion was: from *Gymnasia*, 70 per cent.; from *Realgymnasia*, 27 per cent.; and from *Real* schools only 3 per cent. At the Berlin High School, which occupies a more distinguished position than any other, only 4 per cent. of the students in mechanical engineering came from modern schools. Those who think that the way to compete with Germany is to abolish Greek and Latin are invited to consider these figures.

land they supply mainly from below; they educate boys belonging to the working-classes—boys at work in the mill or at the forge—into foremen, overlookers, managers and experts. In Germany the real work of the technical schools is done in day classes, in England in evening ones. Of course, the distinction is not absolute; there are evening classes in Germany and day classes in England, but the disparity is so great as to prove my point. The following comparative table, drawn up from particulars collected in 1900 by a committee for the corporation of Bolton, will illustrate the differences :—

TECHNICAL OR HIGHER TRADE SCHOOLS.

GERMAN.			ENGLISH.		
Town.	Day Students.	Evening Students.	Town.	Day Students.	Evening Students.
Berlin ... ... (weaving school)	20	250	Bolton ...	40	2,500
Nüremberg ... (building school)	478	353	Birmingham	200	1,500
Chemnitz ... ... (weaving school)	60	none	Leicester ...	18	1,000
Crefeld ... ... (textile school)	200	none	Derby ...	100	1,000
Mühlhausen ... (chemistry)	75	none	Salford ...	60	1,500
Reutlingen ... (spinning and weaving)	150	none	St. Helens	none	1,000

These figures need explanation. The German schools are specialised; the English ones include many miscellaneous studies which swell the numbers. In fact, they perform the functions of the German artisan (*Handwerker*) and guild schools, but they also teach the local manufacturing industries, and they teach them in evening classes. The Berlin school, which is quite exceptional, is the only one of the English type on the list. I think the Bolton

committee must have been mistaken in saying that four of the schools had no evening students ; my own information, which is borne out by Dr. Rose's reports, is that most of them have a few. It remains true, however, that they cater mainly for a superior class of students, and that Germany has not the provision for the technical training upwards of factory workers that we have in England.

This follows from another point of difference. If actual workers are to go to school, not only must the classes be in the evening, but there must be a school in the place where they work and live ; that is to say, technical schools must be generally, if not universally, diffused. In England they are, in Germany they are not. For instance, Düsseldorf is a large and important manufacturing town, in which several industries are carried on. Over 10,000 men are engaged in the metal trades, which include engineering works of the first rank, some 3,000 hands in textiles, and glass, paper and chemicals are also manufactured on a large scale. Yet it has no technical school at all, except for art trades. Students of engineering must go to Duisburg or Hagen ; of textiles to Barmen, Crefeld or Gladbach. Again, one of the most important textile towns in Saxony is Zwickau, but it has no school. Students must go to Reichenbach, Glauchau or Chemnitz, which is impossible for working hands. Many similar instances might be named. In England I have been unable to find any such ; every manufacturing town, even down to those with 20,000 inhabitants, has its own school, though it may be under the shadow of a big neighbour. Writers have urged this as a fault and have criticised the profusion in Lancashire, for example. Not content with a great technological college in Manchester, itself under the shadow of a modern university ; not content with large technical schools in the other great towns—in

Bolton, Oldham, Blackburn, Preston, Burnley, Bury, Rochdale, etc., etc.—every little place must have its own in addition. There are nearly 40 schools in Lancashire that teach cotton-spinning and weaving, as well as other things. Most of the large towns teach mechanical engineering also. Similarly in South Staffordshire, instead of being content with Wolverhampton, all the smaller places round about have schools of their own for teaching metal work and the manufacture of iron and steel. So too in Yorkshire, and in the Northamptonshire boot and shoe district. In London the profusion is bewildering; there are about a score of polytechnics or technical institutes, and a great number of other institutions.

All this is not over-lapping or over-profusion, but absolutely necessary if working hands are to enjoy the advantages of technical instruction. The schools are not, of course, all of equal value and some are very humble affairs, but the best are equal to any and the least are superior to the little hand-loom weaving places which count among the textile schools of Germany and vastly superior to the "correspondence schools" of America. If any other country had the same provision it would be extolled by English writers and platform orators in season and out of season.

The comparative merits of these English technical schools and the German ones to which they correspond (namely the middle schools described above) in regard to manufacturing industries may be a matter of opinion. The German ones are more centralised and specialised, the English more diffused and comprehensive. But I suppose that an ideal system would combine the merits of both, and that can be more readily accomplished from the English starting point. It is certainly easier to add special higher grade institutions to a mass of widely distributed popular ones than to create

the latter; or rather—for this is really the way to put it—it is easier to provide for a comparatively small number of higher grade day students than to give the rank and file such opportunities as they have and use in England. When the superior students come forward they can be accommodated without difficulty. But apart from that I see great strength in the English system. I have a very firm belief in the capacity of our working-classes in the north. Their initiative, industry and energy built up the great industrial edifice, and I see those qualities reflected to-day in the schools reared so quickly by local enterprise and in the eager intelligent faces of the factory lads who throng the evening classes. A scene at Blackburn in particular is printed on my memory, though I have seen the like elsewhere. I was taken into a class-room where a class on pattern-making for weaving was going on. About seventy lads were present. They were so well dressed and superior in their appearance that I asked, Who are these boys? "They are working-lads and the sons of working-men," was the answer. Noting my surprise the teacher called out: "All of you who go to work in the mill to-morrow at six, hold up your hands"; and all but ten held them up. As I say, sights like this can be seen in every large manufacturing town in England, but very rarely in Germany or America.[1]

These young fellows are the pick of the working-classes, the most intelligent, enterprising and ambitious. They do not intend to be workmen; they are qualifying for superior positions. I have found the technical schools universally

[1] The public expenditure on technical schools in England in 1901-02 was £1,008,947 of which £862,002 came from the State grant under the Customs and Excise Act and £146,945 from local rates; 3 county councils, 30 county boroughs, 99 boroughs and 189 urban districts made grants from local rates for technical instruction.

regarded by trade unionists and intelligent workmen as "stepping stones out of the mill".

With regard to the teaching and equipment they are in some respects inferior and in some superior to those in German schools. The latter, I think, carry the intellectual training further, which might be expected from the character of the majority of their students. It was noticed by the party representing the brasswork industry of Birmingham which recently visited Berlin that the effect of the technical training there was to get more "conception" into the work;[1] and I think that holds good in general of all classes of work to which it is applicable. In textiles great attention is paid to the artistic side of dyeing and designing. But very good work in this direction is done in the English schools too. I have seen a letter from the principal of Roubaix, which is one of the most famous European schools, praising some exercises done by the students at the Bradford College and asking how they were taught, as he could not get the same results; and a Bradford-taught boy was not long ago appointed teacher at Roubaix. But the distinguishing merit of English schools lies in the practical grasp of the subjects they impart. I have gained the impression that the teachers have a more real and actual, as distinguished from an academic, knowledge of manufactures. The schools do not teach the actual processes; I believe the trade unions object to that, and it is forbidden. They teach the principles and impart a theoretical mastery which cannot be acquired in the workshop or mill; but the teachers have the practical knowledge which can only be acquired there and are not dominated by the theoretical.

The equipment is probably better on the whole in the German schools, though to that there are exceptions. Most

[1] *The Brassworkers of Berlin and Birmingham.*

of them have been longer established and have had more time to complete their installations; and the greater concentration and specialisation permit of more expenditure on particular institutions. None of our textile schools, for instance, have so complete an installation of cotton machinery as München-Gladbach or so good a museum and library as Crefeld.

So much for the English schools corresponding to the German middle and lower ones. The German high schools are represented in England by the universities and some special colleges of science. Here again a remarkable development has taken place in recent years both in the establishment of science departments in the old universities, particularly Cambridge, and still more in the growth of the new universities of London, Birmingham, Liverpool, Manchester, Leeds, Sheffield and South Wales. They do not, for the most part, contemplate the application of science to industry so directly as the German high schools, but there is no reason why they should not when called upon to do so. I understand from the highest authorities that in equipment and teaching our higher science schools are not inferior; sometimes they are superior. The departments of physical and mechanical science at Cambridge are not surpassed for the highest work by any in the world, and the metallurgical school at Sheffield, which has a very direct industrial bearing, is unique.[1] With the universities, the National Physical

[1] The *Kölnische Zeitung* expresses the opinion of German delegates at the meeting of the Iron and Steel Institute at Sheffield, in September, 1905, thus: "The extensive new equipments give one the impression that the well-known complaint of English people, that in the way of education, they are much behind does not apply any longer to Sheffield, particularly not as regards the metallurgic and engineering sections. On the contrary, there is much—indeed, very much—for Germany to learn there". Had they visited the metallurgical and mining sections at Birmingham they might have said the same.

Laboratory and the coming Imperial College at Kensington it is not schools that we lack now, but scholars.

When comparisons are made between the number of students of engineering, for instance, at science schools here and in Germany or elsewhere it is putting the boot on the wrong leg to call for more schools; the real difference lies in the lack of scholars. And the reason is that manufacturers in Germany and elsewhese have long ago realised the value of highly trained men in industry and have created a demand for them. It acts in two ways. Firstly, industry is recognised as a career for men of superior standing and education; the business of manufacturers' expert is well paid and it attracts numbers who would otherwise go into professional or academic life. Secondly, those who do go in for it, instead of gaining all their knowledge at the works, go to a school to acquire a thorough scientific mastery. The thing is demanded and consequently it is supplied. In England the demand is only beginning because the need has not been felt. This accounts for the comparatively small number of industrial science students both at the high schools (universities) and at the day classes of the technical schools. The difference in the attitude of manufacturers is shown very clearly in some of the textile trades. In a comparatively small German mill making dress goods I found eighteen designers at work all men of good education; in a large English one I found three or four, and those not of the same calibre. Some German makers of dress goods employ from sixty to eighty designers for several weeks in preparation for a new season. To be in the forefront it is necessary to have men who have not only learnt designing but possess intelligence and ideas. Fashions are often evolved by consultation between manufacturers' experts and buyers for the trade; the former invent patterns, colours

or combinations, which are submitted to buyers, or the latter have ideas which must be translated into practical shape. I have seen this process going on in a German mill, where one of the designers happened to be engaged with a customer; the two were working out ideas together, making sketches, criticising and altering.

It is only in this way that a hold on the market can be retained. Germans have particular need of well-trained brains for the work, because they are not naturally inventive or gifted with the innate sense of elegance possessed by the French, if they will pardon my saying so. Consequently the manufacturers give liberal support to the schools and further encourage them by providing employment to graduates. There is no doubt that it pays them. A manufacturer in Elberfeld was showing me one day a length of dress material. "That," he said, "is going to England, and it is made of English stuff. I get the materials from England, manufacture them, and send them back. I pay carriage both ways, and yet I can sell this in the English market." "How do you manage to do it?" I asked. "Well," he said, "you see this is a nice design; there is brains in it." It was a good answer, and, I am inclined to believe, the whole answer; for he pays higher wages and more for coal than manufacturers of similar goods in Yorkshire, and there are no kartells in his business. Our manufacturers often complain that German and other foreign competitors steal their designs; and doubtless it is true. They do the same and steal French designs themselves. Every nation helps itself to the ideas of others; but it is not possible to go on competing successfully with borrowed brains and second-hand ideas. The nation which is richest in ideas will come out first; and the Germans realise that more thoroughly, I think, than we do. Hence their efforts in this direction.

Our own schools do excellent work, but they do not command the same superior material. Even when the students have had a higher general education they are in some respects inferior. Sir William Ramsay writes to me in answer to a question about the equipment of our technical schools, and the instruction given there:—

> Our teachers are, on the whole, as good as the German teachers, and our appliances often as good, and in general sufficient. It is in the previous training of the youths who enter our colleges and technical schools that we are defective. Not that German boys are cleverer, or that they have any special knowledge of science subjects, when they enter; but they are much more systematically trained. All their school subjects dovetail together. The whole system is well worked out.

Here, of course, we once more strike the fundamental national difference, and of course, too, the advantage is not all on the German side. It opens up the subject of secondary education, into which I cannot enter; but I beg the reader to notice Sir William Ramsay's observation that the German boys aiming at the industrial science career have no special knowledge of science on entering the technical school or college.

Summing up this comparison we may say that while England has long been backward in technical education, it has of late years righted itself with so much energy that the provision from below is already greatly superior to that of Germany and the provision from above has at least equal potentiality, if the same use is made of it. And that has begun. The demand is increasing and the influence beginning to tell, though it has not yet had time to produce effects comparable in magnitude with those of Germany, which has had a long start. The movement will unquestionably be assisted by the co-ordination of educational institutions under the Education Act of 1902, which places the general and technical schools under the same local ad-

ministration. I have no doubt that in a few years technical education will be developed in England to a degree of completeness which cannot be matched in any other country. The great weakness at present has nothing to do with education, or at least with schooling. It is the fact that a very large proportion of boys never learn or attempt to pursue any trade at all. They follow the line of least resistance, and as soon as they are released from school—and often before—they begin to earn money by unskilled labour as errand boys, shop boys, van boys, newspaper boys and other casual occupations. There is always a demand for their services, and the temptation is irresistible. Thus they grow up without any special knowledge or skill at all. As they grow older and cannot live on boys' wages they are thrust out by the constantly renewed supply of younger lads, and drift into the ranks of casual or inefficient labour. This touches the manufacturing industries but little, because in manufacturing as distinguished from trading towns boys go into the works and factories and do acquire skill, though less thoroughly than in former times when apprenticeship was more general. The case is, therefore, somewhat of a digression from the strict point of view of this book. But it has such an important bearing on the general welfare of the community, and is really responsible for so much that is often attributed to want of technical education, that the mention of it is not irrelevant here. In a sense it is due to want of technical education; in the sense of training, that is to say, but not to the want of schools.

The United States.

After what has been said, the distinguishing features of technical education in the United States can be made clear by comparison in a short space. Broadly, it resembles the

German more than the English system in that it supplies industries from above rather than below ; but it possesses the merits of neither. It has not the specialisation and thoroughness of the one nor the general diffusion of the other. It is so unevenly distributed and so heterogeneous that classification is hardly possible. There are schools corresponding to all the three German types distinguished above, a few corresponding to the English type and some of a novel type. The most important are the high schools, otherwise institutes of technology and technical departments of universities and colleges. They are very numerous and are attended by a large aggregate number of students. The studies preparatory to industrial occupations are classified under the head of several sorts of engineering—namely, civil, chemical, electrical, irrigation, mechanical, metallurgical, mining, marine, sanitary and textile. Out of this list those which have to do with manufactures are, I presume, chemical, electrical, mechanical, metallurgical and textile engineering, though I am not at all sure what is meant by chemical and textile engineering. In 1901 mechanical engineering was taught in 85 institutions to 5,623 students, electrical engineering to 2,696 students in 79 institutions, chemical engineering to 536 students in 15 institutions, and textile engineering to 234 students in 4 institutions ; making a total of 9,089 students. If civil and mining engineering be added the total is 14,130. These are very large numbers, and they testify to a great demand for college-trained men. That is, in fact, the most salient feature of technical education in the States.

It is a demand of comparatively recent growth and it has developed of late years with great rapidity. In writing of Boston I said that the Massachusetts Institute of Technology, opened in 1865, was the oldest establishment of the

kind; but that is not strictly accurate. The Rensselaer Polytechnic at Troy, New York, was opened in 1824; but that was an isolated effort, and it only teaches civil engineering. The real development of academic training in industrial science dates from a much later period. It began at the top with high-class institutions; it did not develop upwards out of ones of lower grade, as in Germany. The lower trade and technical schools have all been added later, and most of them within quite a short time. They have sprung up independently here and there without any plan or relation to each other and chiefly through private enterprise. This accounts for their heterogeneous character and uneven distribution. But the higher grade institutions are still the most numerous. Every State has at least one, at which some technical course is offered, if it is only in "domestic science". New York State and Pennsylvania have ten each. Massachusetts and Illinois have five, and so on. Many are State universities and colleges, many others are private institutions bearing various titles—university, college, school, institute, polytechnic; some are for coloured students.

I call them higher grade or high schools, because I do not know how else to classify them, but of course they are not all of equal standing or value. They vary greatly in every respect and only the very best can be classed with the German technical high schools or the English universities. The greater number have no higher status than many of the English technical schools.

Then we come to a series of schools corresponding more or less with the middle German group. Among these the textile schools stand out as the most specialised and the most nearly resembling the German type on which they are modelled. The oldest is that at Philadelphia, of which I

have given some account; it was opened in 1884 as an addition to the Philadelphia Museum and School of Industrial Art, and it is chiefly devoted to the art side of designing, weaving and dyeing. The number of students in 1901 was 297, of whom 179 attended the evening classes. There are seven other textile schools, all very much more recent; three are in Massachusetts and four in the Southern States. The most important is the one at Lowell of which I have given an account in describing that town. This provision for the textile industries is extremely meagre compared with Germany or England. Nor are the individual schools, though well equipped in a sense, equal to the German and English ones, with the exception, perhaps, of the art work at Philadelphia. The mechanical equipment has been very largely furnished by American machinery makers, which may be good for them but is not good for the teaching. The school should have the most varied selection possible of the best machinery used in the trade; but American mills are full of machinery which is not provided in the schools, while the latter are full of inferior machines presented by the makers, for textile machinery is not a strong point of American manufacture. These schools owe their existence to the initiative of manufacturers but they have received liberal state and municipal support. They are so recent that they are only beginning to exercise an influence. A gentleman in Lowell told me that six months previously he had been asked to find a competent man to take charge of a cotton mill at a salary of $3,500 (£700), and up till then had been unable to find one.

The only other branch of manufacturing industry which appears to command specialised school instruction is watchmaking. The other schools, which may be placed in the middle group, are of a more mixed character, and are chiefly

confined to a few large cities, notably New York and Philadelphia. They are not co-ordinate with the textile schools and bear no resemblance at all to the German engineering (middle) schools. They are more like the lower trade schools at Chemnitz or some of the English technical schools. The best known are the Pratt Institute at New York (Brooklyn) and the Drexel Institute at Philadelphia. The Pratt has day and evening courses and gives instruction in art, dressmaking, general and industrial science, mechanical and building trades. The total number of pupils studying fine art, domestic art, science and technology in 1901 was 1,502, of whom 864 attended day classes, and 638 evening classes. The Drexel is of a higher grade; it does not teach trades, but art and science bearing on industries. The number of pupils attending technical classes in 1901 was, day, 429, evening, 762; total, 1,182.

New York is also noticeable for a number of lower trade schools. The fact seems to strike visitors, who take the provision there as typical of America, which is very far from being the case. These schools teach building trades and handicrafts, and have no bearing on manufacturing industries. They resemble the lower trade schools of Germany, except that a few of them aim at teaching the trades wholly in school and without concurrent or previous real work. The total number of schools in which some sort of manual and industrial training is given is 118, exclusive of those for Indian children. The total number of pupils was 41,059, of whom 14,820 were female. This list does not appear to include a kind of continuation schools kept by the Young Men's Christian Association, in which industrial drawing and sometimes the use of tools is taught together with commercial and general subjects. They are very numerous and have a roll of 26,000 pupils.

Nearly all these lower and middle schools, as well as a large proportion of the colleges and institutes, are the outcome of private enterprise and liberality, which accounts for their extremely heterogeneous character and uneven distribution. It is perhaps an arguable question whether this mode of origin or the action of public authorities, as in Germany and England, indicates a more general interest in technical education, but the uneven distribution accompanying the American plan is a very serious defect. When one comes to make comparisons the most conspicuous thing in America, far more conspicuous than the provision in certain places, is the total absence of it in others. The superiority of England in this respect, which I have pointed out in the case of Germany, is far greater as regards the United States. The most glaring instance of deficiency is Pittsburg. Not only that great seat of industry and its semi-detached neighbour, Allegheny, but the entire district with its series of huge manufacturing concerns, has been up to now without any provision whatever. And there are scores of important industrial towns in the same position, not only in the Southern States or out West, but in New England, New York, New Jersey, Pennsylvania, Ohio and Illinois. A proof that this want is severely felt is that peculiarly American institution, the correspondence school. These schools aim at giving technical instruction by correspondence, and they number their pupils by the hundred thousand. They evidently supply a felt want, but they are only a make-shift substitute for class-rooms, laboratories and workshops.

There seems to be a general opinion that technical education has not had much to do with the industrial expansion of the United States in the past. It has certainly played a very much smaller part than in Germany. Most

of the large concerns were built by men of energy who had little or no schooling, and rose from the ranks. The present provision has come since the great railway and industrial development, and in consequence of it. The rapid expansion caused a demand for trained men, who could not be supplied fast enough. This, I think, accounts for what I have called the supply from above. There was an opening for men of good education, and the colleges hastened to fill it. The pace has continually increased, and the large corporations sometimes "order" men by the dozen. When I was at the Technological Institute at Boston I was told that the United States Steel Corporation had just ordered a batch of fifty; they go to the works on trial for a year. The large numbers turned out in recent years must be having a considerable effect. Yet I see that in 1900 one-fourth of the total number of "manufacturers and officials" engaged in manufacturing and mechanical occupations were foreigners. I think this highly significant fact must have escaped the attention of those who think that Europe has much to learn from America in the matter. The myth of "the American workman" and his superior skill has been dealt with more than once. Technical education, high and low, appears to suffer from the national defect of want of thoroughness, which arises from the craving for short cuts. Hence the correspondence schools and the attempt to teach industries in school without practical experience. Opinion may be divided on the question whether technical schooling ought to be preceded, accompanied or followed by practical training. I can only form a second-hand judgment derived from men of experience, but their verdict is decisive. I have asked the question of a great many leading manufacturers and managers in all three countries, and they were un-

animous in condemning school training without practical experience. In the German technical schools previous practical knowledge is usually insisted on for a full course of study. In America the theoretical study precedes practical work, and the complaint of manufacturers is that it often unfits men for the workshop. Some high authorities have found the American training shallow and superficial. This coincides with the experience of the Rhodes scholars at Oxford in other studies. American university graduates have been found less well grounded than English schoolboys of the same class.

From a broad survey of the whole educational field three salient results emerge, like peaks rising from the plain, and mark the three countries—in America commercial push, in Germany the careful performance of a set task, in England a traditional standard of character and conduct. The last is the contribution of the "public" schools, which are still the most valuable, as they are the most distinctive, educational asset we possess.[1] The relative value of the three will depend on the point of view, and, of course, from the industrial standpoint the last is of hardly any value at all; but in other fields it is supremely valuable. And when you have a good thing, keep it; supplement it, add to it by all means, but keep it. The counsel which I see daily expounded by writers on education, that in order to get something that you have not you must begin by destroying something that you have, is a counsel of blindness and folly.

[1] Their peculiar value lies in their traditions incorporated in a discipline which is enforced chiefly by the boys on each other in their corporate life. Men of ability but of humble birth, resentfully conscious of not having had the educational advantages enjoyed by the sons of wealthier men, are not aware that the distinctive merit of that education lies in the severe and prolonged discipline which it imposes, not in book-learning but in personal conduct and habits.

CHAPTER XVIII.

CONCLUSION.

We have now examined the chief conditions affecting industrial life in the three countries and are in a position to gather up the threads. They are so numerous that even if any reader has been sufficiently interested to wade through the whole book I can hardly expect him to form a compact and definite conclusion off-hand out of such varied elements; but to me, having lived so long with them, they have focussed themselves into a very clear and speaking picture or set of pictures.

We have here the three leading industrial nations, distinguished by natural circumstances and human qualities. By virtue of both England or rather Great Britain developed a great industrial activity earlier than the others and obtained a long start. I say by virtue of both, because it was not merely through natural resources and the advantage of situation and insular security that Great Britain took so great a lead in the last century, but also through the skill, energy and unparalleled inventiveness of her people. The indefinite maintenance of the lead then obtained was neither to be expected nor desired. The other nations could not fail to develop their resources as opportunity offered and the means became available, and when the time came their activity would naturally be greater and their expansion more rapid, because delayed. All that is obvious. But they have done a great deal more than make up for lost

time and reduce the start which circumstances gave to this country; they have within the last twenty years or less not only caught us up in many things in which we were once unrivalled, but have surpassed us in some. They compete successfully not only in neutral markets but in the home market and that with products once peculiarly British. It is not necessary to furnish statistical proof or to calculate the precise degree of their success. The broad fact is patent and suffices. The admission of one of the greatest captains of industry in England, quoted in a previous chapter, is enough for my purpose—"We have been outstripped in some respects". How has this happened?

Now if one country alone be taken, it is easy to find some consolatory cause. For instance, we may point to the superior natural resources of the United States or to freedom from legislative restrictions; but Germany has no such superior resources or freedom from restrictions. If, on the other hand, we pick out low wages in Germany and attribute her success to that, the argument rebounds when applied to America. By taking both we are saved from such fallacies, and if my comparison has any merit, it is that. No reader of this book, whatever else he may gather, can fail to perceive that in most things Germany and the United States are at opposite poles. But they have two things in common against England. The first of these is composed of several elements, but they may all be compressed into one word—work; the second is the tariff. I will dispose of the latter first.

I have hitherto said nothing about the controversial subject of Free Trade *v.* Protection, and what I have to say now will not detain us long. It is a business matter, not directly concerned with production or efficiency at all, but with buying and selling. Its indirect influence, however,

is so great that it must be taken into account among the forces governing the situation.

Now, all business consists in buying and selling. Ultimately, no doubt, it is exchange of commodities, but since exchange only takes place through the medium of money, as the standard of value, it is actually buying and selling. Successful business consists in buying cheap and selling dear; the lower the buying and the higher the selling price the greater the success. The object of free trade is to buy cheap, that of protection, or duties on imported commodities is to sell dearer. Success does not depend on one or the other, but on the relation between the two, and that depends on a great many circumstances. It is, therefore, obviously impossible to lay down any absolute rule, and say that buying at the lowest price *or* selling at the highest is necessarily advantageous. If buying at the cheapest rate entails selling at an unremunerative one, whereas a better price can be obtained by buying a little dearer, the latter may be more advantageous. Similarly, if selling at a high price entails buying too dear, it may be better to sell at a lower price. Free trade looks solely to the buying price and leaves the selling to take care of itself; protection looks to the selling price, and, if unscientific, it looks to nothing else, but if scientific it keeps an eye on the buying price and endeavours to adjust the relation of the two to the best advantage.

When a country imposes a protective tariff against foreign goods, it does so in order to secure a remunerative selling price for the protected commodities at home. This prevents the population from buying those things as cheap as they might have done. It does not necessarily make the things dearer than they were before, or dearer than in some unprotected country, because prices are also affected

by other conditions; but it necessarily makes them dearer than they would be if unprotected. That is its object. It is, in effect, a tax paid by the community to ensure a remunerative price to the producers of the protected things. What the community buys therewith is the maintenance of the persons engaged in the protected industries, and the consequent increase of national productivity and strength. If it does buy this and could not otherwise secure the same result, it may make a good bargain; if it does not, it makes a bad one. It follows that if the industries necessary to maintain the population can be successfully carried on without protection, it is to the advantage of the community to do without it. No sane person buys dearer than he need for the mere fun of it.

The protection afforded by a tariff undoubtedly stimulates the protected industries; it acts like a hothouse on a plant. By securing a remunerative home market it enables the producers to sell a portion of their products abroad at a lower rate than they otherwise could and so increase their output to its highest economical capacity. This is called "dumping" by those who suffer from it. I do not know the origin or proper meaning of the word, but it is intended to convey dislike and contempt, like "black-leg" and similar slang terms. Both Germany and America dump surplus products in Great Britain and gain thereby an economic advantage for the industries affected. Further, the command of the home market secured by the tariff, enables the producers to form combinations among themselves to maintain prices or otherwise manipulate the market, which they could not do if it were open to all competitors. These combinations are called by various names—trusts, combines, corporations, syndicates, kartells and so on. They have been very much discussed of late years, but according to

my observation those who know most about them do not discuss them ; they form them. Their effect on the general welfare of the community does not concern me ; its consideration would involve the whole question of the ultimate economic bearing of protection and free trade, which is a thing that nobody understands, as the volumes written about it abundantly prove. They contradict one another and are contradicted by events. What I am concerned with is the actual international competition of industries ; and with regard to that it is undeniable that protection with its corollaries does give the protected competitors a great immediate economic advantage over unprotected ones. Whether this pays or does not pay a protecting country as a whole, or in the end, is a question which I leave to the controversialists.

So much for the first of the two things which Germany and America have in common against this unprotected country. Some people think that it is the whole story ; others take the opposite view and contend that Germany and America have succeeded in competition as they have, not because of protection, but in spite of it. Probably, however, more take a middle view, and while recognising that the protective tariffs have handicapped British competition, think that there have been other factors in play. That is my own conclusion, and it is with those other factors that this book deals. I am convinced from what I have seen in the three countries—and I submit with all humility that no one has attempted a comparative study either so close or so comprehensive—that tariffs alone, though they be raised as high as Haman's gallows, could not do for Germany and America what they have done by other means.

I sum them up under the word "work," because it

covers them all, and no other does. The methods are so entirely different that they only have this common quality; and here lies the value of the double comparison. It enables us to see that the essential thing is not this or that, as we have so often been told, but just work, which finds expression in different forms according to national circumstances and character. The British people have been deluged of late years with exhortations to find salvation in copying some particular procedure or institution which happens to have impressed an observer in some other country. The advice may be good, but probably it is not, for the particular thing recommended has been adapted to conditions which certainly differ in some degree, and may differ very widely indeed. The real thing to copy is the spirit which has issued in that procedure or institution, and without which it is useless.

The industrial success which has "outstripped" England has been reached, I repeat, by widely different roads in Germany and America; in the latter by the almost unaided efforts of the persons engaged in industry, in the former by the co-operation and inter-play of a large number of factors, of which industrial effort is only one, though the most important. This will, perhaps, require a little further explanation.

The American method of work in the industrial sphere is distinguished by the following features: enterprise, audacity, push, restlessness, eagerness for novelty, inventiveness, emulation and cupidity. Employers and employed have exhibited the same in their degree. The manufacturer aims at extending his business, he takes up novelties, encourages invention, studies the market, tries devices to increase output and diminish cost. Hence, for instance, the standardisation of products, the organisation of the workshops, the

demand for highly educated officers, and the alert control exercised by large combinations, which enable a central authority to check the management of each component by the results of the rest, and to screw up any that are growing slack.[1] The employed are eager to earn as much as possible and to better themselves. Both are absorbed in their occupation, and bend all their energies to it. I do not mean to say that all these qualities are invariably present; I have shown that in some trades and centres they have been conspicuously absent. But they are the distinctive qualities and methods that have won success; and, broadly speaking, they have been exercised without either help, save the tariff, or hindrance from outside.

The industrial expansion of Germany presents another picture. It has been achieved by equally hard work, but the adventurous audacity and restless search for novelty of America have been replaced by steady and watchful effort. The circumstances of the country, not less than the national character, have imposed this difference. But there is another, not less striking, to which every subject handled in this book bears witness. The industrial population has not been left to carve out its own destiny, but has been guided and helped at every step. All sections of the community, from the throne to the workhouse, have contributed something. *Laisser faire* or *Manchesterthum*, as they say in Germany, is dead; ordered regulation is accepted and applied with infinite pains by the legislature, Government departments, municipalities and private citizens. It is seen

[1] At the little conference of British manufacturers who had been through the States, which is mentioned in the chapter on Wages, great stress was laid on the American method of combination, concentration and strict management. One gentleman present had recently compared results in thirteen oil mills and found great leakage; so he turned out the managers and concentrated the management in one office.

not only in the scientific tariff but in the careful and judicious factory code, the state system of insurance, the organisation of traffic and transport by railway and canal, the fostering of the mercantile marine, the educational provision, municipal action and poor-law administration. So the edifice has been built up four-square and buttressed about on every side. It is a wonderful achievement in which every unit has played a part, and the spirit which has brought it about is the spirit of duty and work. Here is the explanation of the two remarkable facts that a comparatively poor country, labouring under considerable natural disabilities, has raised itself to the very front rank of industrial productivity, and that its poorer classes though far less favoured by circumstances, yet maintain a higher level of well-being and a far higher level of vitality than those of its wealthier rivals. And to those may be added a third—the power of making an exceptionally quick recovery from depression caused by the fluctuations of trade. Germany compels admiration.

England is like a composite photograph, in which two likenesses are blurred into one. It shows traces of American enterprise and of German order, but the enterprise is faded and the order muddled. They combine to a curious travesty in which activity and perseverance assume the expression of ease and indolence. The once enterprising manufacturer has grown slack, he has let the business take care of itself,[1] while he is shooting grouse or yachting in the Mediterranean. That is *his* business. The once unequalled workman has adopted the motto "Get as much and do as

[1] Sir John Brunner has given me an amusing illustration of the way in which some concerns are conducted. He has, he says, frequently known two foremen in a woollen mill, each with *carte blanche* to buy a particular chemical, the one on the lower floor used to counteract an excess on the upper floor, and the same traveller selling both chemicals.

little as possible"; *his* business is football or betting.[1] Each blames the other. [I shall have to qualify these remarks presently; I am now drawing a broad comparative picture.] Then the manufacturer complains of being handicapped in various ways; and he is justified. He *is* handicapped by laws and by-laws and obsolete regulations, which have the effect of hindering him in some respect without any set-off in the way of help. And what do all these mean but carelessness and neglect on some one's part? Legislators who pass laws without taking the trouble to ascertain the facts or understand what they are doing, or who fail to alter obsolete and detrimental ones, such as the patent laws and the tax on industrial alcohol; Government departments too indolent to watch events and adapt regulations to changing conditions; local authorities applying by-laws without discretion, piling up rates without thought and administering the poor law without care; everybody bent on pleasure and amusement. That is the universal business. No one is in a position to abuse the rest; they are all in the picture and wear the same expression from top to bottom of the social scale. Not every individual, of course, but every class. We are a nation at play. Work is a nuisance, an evil necessity to be shirked and hurried over as quickly and easily as possible in order that we may get away to the real business of life—the golf course, the bridge table, the cricket and football field or some other of the thousand amusements which occupy our minds, and for which no trouble is too great.

It is not necessary to labour the case. Since I began this investigation the broad facts of the situation have

[1] In a certain electrical works the men winding coils got slower and slower until at last the average time taken to wind a single coil was about ninety minutes. Girls were put on, and a girl will now wind more before breakfast than a man did all day.

become widely recognised, and what was thought three years ago to be an amusing paradox is now reflected as sober truth in every newspaper. This autumn many leading journals have published long and severe reflections from many correspondents on the national failings, which save me the trouble of arguing the point at length. I will take the liberty of quoting a few samples, and as others see us better than we see ourselves I will give precedence to the candid foreigner.

"A German Resident" writes in *The National Review* (June, 1905):—

> The young man or woman leaves the primary school in England with no idea of duty, and no knowledge that the position of your country was won by the sacrifices of past generations in war, or that war is still one of the means by which the progress of the race is maintained.
>
> Your workers are determined to level down, not to level up; they would drag down the industrious and energetic to the standard of the idler and the shirker. It is within my own knowledge that wages have recently risen in England to a degree beyond the advance in productivity so that your labour is paid more and produces less.
>
> So far as my own experience and observation go, the majority of your workers read little but the sporting press, and care for little but betting and sport. It is always a source of wonder to me, after seeing, as I have seen, the thousands who go to Lord's or to the Oval on some week-day, not a holiday—and you now live in almost perpetual holiday—that any work at all is done in England. If your men idle two or three days in the week, and do less than they ought to do on the other four, they cannot wonder that they do not hold their own, or that there are many unemployed.
>
> Though your workers are now earning high wages, I observe that they do not use their money well. Instead of spending it upon their homes, and paying higher rents, or buying better food, or saving for bad times, it goes too often to the bookmaker or the public-house; and yet you will hear these men complain that they are not provided with better houses by the municipality or by the State. They are allowed to travel on railways at a price which does not pay the companies, by a special law made in favour of their class, yet they seem to think that they ought to pay nothing for their journeys. Perpetually they expect everything to be given to them, and themselves to give nothing.
>
> You are even getting ready, I see, to feed the children of the poor, and next I suppose you will clothe them as well, winding up by maintaining their parents. In fact, you seem bent upon producing a nation of

degenerate paupers, not of sturdy men. I always thought that the English were a nation with strong common-sense, but of late I have begun to doubt that belief. Your politicians appear ready to promise anything to the working-man, provided it is at somebody else's expense; he already pays little taxation, but I understand he is to pay less in future. Whatever he asks for is to be given to him, as to a spoilt child, whether it is good for him or not. You call this democratic government; I call it the rule of the nursery. The children are to govern the wise and far-seeing men—to ruin your State in gratifying their own selfish caprices.

Take the administration of your towns. It is impossible to find out who is responsible for what is done or left undone. The maximum of money is expended for the minimum of effect by a host of jarring authorities, who are driven on to foolish measures by the mob.

An American, Mr. John T. Taylor of New York, writes in *The Daily Telegraph*:—

And right here I will state my conviction as a soldier, a surgeon, a sociologist and a student of history, that however bad your War Office and Army are (and I admit they are both very bad), yet the vast majority of the people of Great Britain are very much worse than either—and they are still rapidly declining in all the vigorous virtues of true manliness.

The plain truth is the English are suffering the physical diseases which arise from excess and immorality. Your females show their physical degeneration by their excessive increase in stature, which has always been a characteristic of those ancient races which have been killed off the face of the earth by their luxuries and vices; for as human females increase in size so also they decrease in vigour, endurance and fruitfulness. Thus, in spite of all the scientific and sanitary improvements you have made, not only has your birth-rate declined faster than that of every other nation in Europe during the last thirty years, but you have enormous increases of premature births, of congenitally defective infants, cripples, etc., of feeble-minded children, and a continously diminishing proportion of male to female infants. These diseases produce that weakness of mind, that childishness, from whence arises the love of games and horror of work which distinguishes the modern Britons from their grand and noble ancestors, whose daring and independent spirit was superior to that of any other nation in the world. Nowhere on earth is the pauper-spirit so extravagantly developed as in England, where begging has been elevated to a virtue, so that now few Britons, from the highest to the lowest, are ashamed to beg either for themselves or others. To waste and want are now the leading characteristics of the majority of Anglo-Saxons. So wasteful are British men—and women also—that if your workmen's wages had been doubled ten years ago, and the cost of rent, food and clothing reduced by one-half, the extra cash, instead of being saved to provide them with an independence against sickness or old age, would have been squandered in drink, tawdry finery, gambling, childish amusements, and immorality; and the physical and mental condition of your people would have been far

worse even than it is to-day. Family duties, the honour and glory of parentage, would have been shirked just as much, or even more than they are to-day. Unwilling to feed their own offspring, the trade unionists are demanding that their children shall be fed at the expense of the State, and that, at the same time, they themselves shall be relieved of all taxation, and shall be housed by the State. Can such mean-souled creatures who shirk their duties to their families ever be induced to do any military duty to defend their country? I calculate they cannot.

A "Russian of position," signing himself E. O., writes in *The Pall Mall Gazette*:—

But, I repeat, it is too late for you to take any action that will save your race from speedy extinction, because during the last thirty years the English people have become mentally, morally, and physically rotten to the core. If your male population only were defective there might be some chance of your regeneration; but your women have decayed also, as is clearly proved by the miserably feeble, imbecile, crippled and neurotic children which they bring into the world to be future English citizens. It is not town life, poverty, nor hardships, but your decadent vices which have brought mental and physical decay upon all classes of the English people, rich and poor alike, and made you such unpatriotic, cowardly curs as you are to-day. I knew England well during my mission here between 1870 and 1879, and by recent examination I find there have been stupendous improvements in all the conditions of life of the working-classes, and of the very lowest classes also; yet the physical and mental debility of the English and their criminal depravity are quite three times worse than they were thirty years ago.

The worst material conditions surrounding your poorest classes in England would be considered splendidly luxurious and healthy by the best-paid working classes of Russia and of most European and American cities; and yet your politicians, pseudo-philanthropists and parsons of three hundred sects, pander to the masses by telling them that their diseases and distress are not caused by their gross immorality, idleness and extravagance, but by conditions which can be cured by charity or Acts of Parliament.

Thus the candid friend. But the criticisms of foreign observers have been fully equalled by those of Englishmen who have seen something of other countries, which give them a standard of comparison.

An "Old Mechanic of the Old School" writes in *The Standard*:—

Although I never got on to be a foreman, I had one bit of good luck a few years ago. I was sent with some other men to put up new machinery at gasworks in Germany. There I learned how the German workmen

manage to be happy, strong and healthy, and to behave like gentlemen on much less wages than English workmen get. German workmen are not sportsmen, but they are gentlemen in conduct and manners, good husbands and good fathers. Those who have been physically fit for and have done their military service are mighty proud of it, and so are their womenfolk.

I cannot help thinking myself but that the worry and excitement of betting on sporting events is ruining the health and stamina of the majority of our working-men. I am not much of a Puritan; I had a bet on Sayers in 1860, and I have made a few bets since; and I am not a total abstainer from alcohol and tobacco. But I certainly am convinced that if English working-men go on in the same way that they have done during the last fifteen years the English nation, as well as the British Empire, will go to the dogs very speedily, although we may have no European wars to hasten on our destruction, for the rot is taking place in the very heart of the people. Betting men and drinking women are stocking the country with weakly children. The working-men seem to have lost their former high-spirited independence, and trade unions now select as leaders those men only who are the apostles of pauperism and who demand State-aid for every unionist.

And now I will close this letter, which has taken me a long time to write, by stating my conviction that a judicious system of universal military service for home defence would solve the unemployed difficulty, and confer more real benefit on all the working-classes than a rise of 30 per cent. in wages and the expenditure of a hundred million pounds on rehousing of the poorer people. As I am over sixty-five years old, and not an educated man, you must pardon me being long-winded and bringing in other points beside sport.

A correspondent, whose position is guaranteed by large print, the place of honour and a leading article, writes to *The Times*, under the signature of "Vidi," on the subject of the Anglo-French *entente*. After speaking of the "moral regeneration" of France and the earnest tone of public opinion there, he goes on to say:—

This, Sir, is, as briefly as the nature and importance of the subject permit, the result of inquiry on the French side of the Channel. May I venture to append some account of the impressions received in England? There, satisfaction at the happy understanding seemed to me not less deep and real than in France, though the state of the public mind in England was much less encouraging, and the reasons assigned for the satisfaction were less coherent. I found, indeed, the present "moral tone" of Great Britain far inferior to that of France. To use a theological expression, France appears to have "grown in grace," while England seems to have "backslidden" since 1901, when I last had an opportunity of judging

English feeling at first hand. Then the chastening influence of South African disaster, ignominy and reparative effort was still apparent, and seemed to justify high hopes for the future. To-day it is discouraging to see the lessons of that ordeal still unlearnt, the warnings in great part unheeded, and all classes of the nation bent on gratifying an un-English passion for luxury and excitement. Large ideas seem to be tabooed, and empty "cleverness" exalted; responsibilities to be ignored; a hand-to-mouth happy-go-luckiness to be the prevailing mood, and (sorry homage to Carlyle!) the dominant spirit to be visible even in the streets, where women of all classes dress at 10 A.M. as though life were a perpetual garden party. The exaggerations of sport, against which Mr. Kipling pungently protested, are as manifest as ever, and the ravages of various forms of alcoholism unabated. But the most distressing feature in England to-day is the lack of moral purpose and conviction—purpose and conviction, I mean, such as to inspire steady individual sacrifice for the attainment of a common end. I should scarcely have dared to trust my own impressions, had they not been confirmed in a dozen quarters by men whose hands are on the public pulse. One such said: "We are in a bad way; we shall muddle along till serious trouble comes, and then it will be too late. England is not susceptible of government by ideas, nor even by steadfast sentiment. She tolerates only spasmodic pandering to the whims of a capricious and half-educated public". Another said: "Underneath we are still sound, but we have run to seed and want two or three years of good stiff adversity to lick us into shape." And yet another complained: "Despite the Japanese example, we cannot generate any real spirit of every-day devotion to the common good. We lack 'drive' and deep conviction. We have some patriotic instincts and prejudices, but prejudice is a bad makeshift for reasoned purpose". The names of the men who spoke thus would startle many of your readers; none of them are party politicians.

These extracts, which are merely samples from masses of recent correspondence, refer to more than industrial efficiency; but the moral is the same. In every branch of human activity work *is* efficiency, and we play more than any other people of the same standing. It may be urged that this is better than too much work, that relaxation is desirable, and so forth. There is something to be said for that view. An American gentleman said to me one day: "We are a tearing, driving, scheming lot here. The Englishman leads a tranquil, happy life, and I for one envy him." I certainly am very far from urging imitation of the American model, for, in spite of all its activity, the

American nation—green in the rind, too ripe at the core—shows more ominous symptoms than the idle, sport-ridden, pleasure-seeking British people. But that is not the point. I am not going to argue what is better or not, because I do not know what "better" means; but this I do know, that the man who works will beat the man who does not, and the nations which have "outstripped" us in industry—which *is* the point—have done so by working harder.

And yet I regard the future in this matter with entire equanimity, not because I am an optimist—which means, I take it, a person who thinks that everything will "come right" with or without reason—but because I see definite grounds for confidence. The strong comments I have quoted above are true enough so far as they go, but most of them are one-sided, superficial and already a little out of date. The last extract is more measured than the rest, and it gets nearer to the heart of the matter.

What is the cause of this national condition which is producing so much searching of heart in one manifestation or another—military inefficiency, industrial decline, physical deterioration, diminishing vitality, increase of unemployment? It is nothing whatever but over-prosperity, which has always produced the same results in every nation which has suffered from it. I leave it to others to expound the economic causes of the great increase of wealth in this country which set in after the Franco-German war. It has been marked by fluctuations, but has, until lately, gone on progressively; the fact and its effects are plain to every eye and provable by statistical evidence *ad infinitum*. The standard of luxury, comfort and subsistence has risen throughout the scale. The wealth is diffused; not equally, of course, but diffused. There is no country in which wealth is so generally diffused, and that is why it causes so

much demoralisation. It is not the concentration of wealth that demoralises a nation, but its diffusion, for the simple arithmetical reason that diffusion exposes a larger number of individuals to the risk of demoralisation which wealth undeniably brings to most people. Perhaps if it were still more diffused it would be less dangerous, but the standard at which demoralisation begins is very low. A man who earns 30s. a week and spends 15s., 10s. or even 5s. on self-indulgence and pleasure is demoralised by wealth no less than Hoggenheimer the millionaire, who is bored in the morning, bored in the afternoon and bored in the evening. Those who readily admit and denounce the demoralisation caused by wealth among the rich and the bourgeois classes will probably deny its prevalence among the poor, but those who really know them will bear me out. I quote a particular illustration from Mr. Russell Rea, of Hampstead :—

> I can give a striking example of this social process from my own experience. In a particular branch of their business the firm with which I am connected employs a number of men, highly paid, earning from 40s. to 50s. per week, with no skill that cannot be acquired in a few weeks, but necessarily of fine physique. These men are all Irishmen—they will not admit an Englishman—mostly raw Irish lads from Donegal, who can scarcely speak English when they arrive. They come sober men enough, for they have never since the day of their birth possessed so large a sum as 1s. which they were free to spend on drink or anything else. In a few weeks' time they become, with scarcely an exception, the hardest drinkers in the neighbourhood—15s. or 20s. appears to them to be a sufficient, even a lavish, allowance for the young Irish wife each possesses. All the rest is spent on drinking, treating, and perhaps betting, and they are almost invariably destitute at the end of each week.

I have already drawn attention to Mr. Rowntree's analysis of "poverty" in York, of which two-thirds is self-inflicted by similar indulgence. In no country have the poorer classes such an easy time or so little need of effort, in none are they so wasteful and reckless. America is called "the working-man's Paradise" by those who do

not know it. Mr. Moseley's trade unionists, who saw behind the shop window, did not think so, though they seriously under-estimated the relative price of food; British workmen in America do not think so. I asked a great many, and the warmest affirmative was: "I have got accustomed to it now". More typical answers were: "A competent man had better stop at home," and "A working-man lives like a gentleman in England compared with what he does in America". These and similar answers were from men in good employment earning high wages.

Life is easier here, much easier, in spite of American wages. As for Germany, there is no comparison. And under these easy conditions the Gospel of Ease has permeated the nation, and has been preached from every pulpit and every platform. This is what is called "Progress". Sir William Harcourt, in the last public speech he made, put the truth in these words: "The object of the party of progress is to make life easier and more comfortable for all classes". That is so. Politicians compete with each other in promising it, "reformers" demand it, statisticians prove it, parsons rejoice over it, and newspapers applaud it. "Easier and more comfortable;" what an ideal! Comfort is the greatest good, hard work is an evil, discipline degrading, sacrifice a monstrous thing, suffering not to be thought of, and if duty entail these things, then away with it. Let us all be easy and comfortable. So men clamoured about the "strain" of the South African war. On three occasions, hearing this talk which was borrowed from the newspapers, I asked those present, "Is there a single man in this town who has forgone a single cigar or glass of beer, is there a single woman who has sacrificed a new hat on account of the war?" And everyone was compelled to answer "No". "Then where is the strain?"

We have been brought to this state by over-prosperity ; we have taken things easy because we could afford it. The other nations deride, as my quotations show, but if they had been in the same condition they would be as bad or worse. Thoughtful Germans have said to me—" We should do just the same in your place ". Indeed, they would do worse, for their pleasure runs less to things that foster healthy endurance and hardihood. They are no more exempt from the demoralisation of prosperity than any one else, and if they do not see signs of it already among themselves, they must be very blind. They have exercised the virtues and qualities, to which I have done full justice, because they have been obliged. Their educational system, which forms the foundation, is a legacy from the conquest of Napoleon. Thus only could they again build up a free and strong nation. They have learnt in the great school, the school of adversity.

And not otherwise the Americans. A man has to work there, too, or he fares ill. Four-fifths of those who inherit wealth live idle lives and dissipate the money as they do here ;[1] and the luxury, follies and vulgar extravagances of the idle rich far surpass those of the same class in England. The spirit of materialism is more pervasive and dominant. The strenuous life of the men, which is so much admired, is largely forced upon them by the insatiable craving of the women for pleasure, amusement and gratification of every kind. Hence, too, the rapidly falling vitality of the native stock, which is already far lower than in Great Britain, and only masked by the constant infusion of European peasant blood. I think it was Daniel Webster who said that the American nation was formed in the school of adversity ;

[1] The proportion was named to me by the editor of a great American newspaper.

there are abundant signs that the far more critical school of prosperity, in which no great nation has yet graduated with honours, is beyond its strength.

But the weakness of others, however consoling to contemplate, does not make our case better. What are the grounds of confidence in the future? Simply this, that the excessive prosperity and the Gospel of Ease with it are already coming to an end. They have had a fairly long innings (the national metaphor is in place), but not so long as to accomplish hopeless ruin. I remember when all the moral teachers—Carlyle, Kingsley, Ruskin and others—exhorted manliness and work; I was brought up on them. I remember something still more significant, the comic song of the day,[1] which had the refrain—

Work, boys, work and be contented.

And there was another which ran—

Then never sit down
With a tear or a frown,
But paddle your own canoe.

We have travelled far since then, but not long, and I am satisfied that we have not lost the energy we had. We still have more physical energy than any of our rivals; it comes from our detestable climate, the greatest asset we have and happily imperishable. The proofs are about us; one is the very devotion to games and sports, and the seriousness with which they are taken. It is a sign of energy, which must find an outlet and finds it here; we must make a business even of pleasure. Another is the efficiency of some branches of active life. No one contends that our naval service or mercantile marine is inefficient.

[1] The future historian or sociologist who wants to understand this epoch will carefully study two things which pass without serious attention—the popular comic songs and the current advertisements; these mirror the people.

And why are they not? Simply because they cannot be When men go to sea—and none go to sea as the British do —they have to deal with the forces of nature, and if they are incompetent or neglectful they go to the bottom. Similarly with civil engineering; the men who bridged the Forth and dammed the Nile are not inefficient. So too, our "out-posts of empire" and frontier garrisons; they carry their lives in their hand, and no men that this or any other nation has ever sent forth were more efficient.

Necessity is the great teacher, and we have the energy to respond to her touch when we feel it. We have begun to feel it at home. In the industrial world manufacturers felt it first; years ago the cotton trade felt it and responded. Others have felt it more recently and are responding, as I have shown in the chapter on Factory Conditions. They are rebuilding, reorganising, renewing plant, extending their operations, forming combinations, adopting improvements, employing technical skill and learning from others. At the present time the best of them are, I do not hesitate to assert, more alert than any of their rivals. The owner of a great Bradford mill said to me, "I regard the Dingley tariff as the greatest blessing to English manufacturers; it has made them wake up". The workmen are waking up too, not so quickly because they did not feel it so soon and have been less in fault, but the leaders know. Some have been about the world and know that foreign competitors can no longer be despised, and that our men must work to hold their own. I see the awakening still more among the younger lads in those evening classes at the technical schools which I have described. There is no need for wages to be lowered, which is what workmen fear when they hear of foreign competition, but wages must be earned. There is no need for hours to be lengthened, but they must be filled by

honest endeavour. Even prominent labour leaders have been moved to tell their clients that they have some faults and duties and are not merely suffering martyrs ground beneath the heel of oppressors.

I see an awakening in Government departments, which are collecting and disseminating information. The Board of Trade has appointed an advisory committee of business experts. I see an awakening among the general public. The concern about education is one sign, the numerous leagues for promoting useful services another, and the attention given to industrial subjects by important newspapers a third. Still more significant is the general revolt against pauperism. It has become impossible to relieve the unfortunate because the hordes of shirkers and wastrels, brought upon us by the Gospel of Ease, block the way; and everyone who touches the problem realises the necessity of discrimination and differential treatment. The pressure of the unemployed, due to national slackness and the failure of production to keep pace with the growth of population and of the merely trading element, has begun to exercise a salutary and stimulating influence which may be trusted to continue for a long time to come. I look with confidence to the unemployed to prove the folly of breeding loafers and to induce a sane and manly habit of thought.

Then another bracing breeze is beginning to blow on municipal mismanagement, and there may even be hope for that epitome of all the inefficiencies, Parliament itself.

For these and the like reasons I think we may rely on the steady massive pressure of economic conditions to correct the functional disorder, brought on by repletion in a still fairly healthy body, but not yet advanced to an organic disease. If, however, I am wrong, and economic pressure fails, then the disease will certainly advance until

nothing but a major surgical operation, such as the landing of 100,000 Prussians, can save the patient. We have got too far for talk and homilies are vain things; but this book may chance to fall into the hands of some impressionable lad troubled about "problems" and "systems," and to him I would say: "Don't worry; you were not born to set the world right, no one is; but you can play your part. Be a man; don't grumble or whine or shirk; earn your living; work, do your duty, and be as good and kind to others as you can. If your country calls on you for sacrifice, be glad and proud to render it." If every one did this, the "system" would not matter a straw; so long as the majority do not, no system would make any difference.

A final word about industrial efficiency and the fiscal question. It follows from the views just expressed that in my opinion the artificial assistance to industry afforded by protection would at the present juncture have a disastrous influence by checking the salutary lesson to which the industrial world is beginning to respond. But beyond the immediate future my conviction, derived from what I have seen of the strength of their rivals, is that our manufacturers will not be able to compete indefinitely against the handicap of closed markets and free imports. I regard Germany as a far more formidable competitor than the United States; she has more stability. The Germans, unlike the French, the Italians, the Americans and the British, have no special line of their own, but they can learn everything, except perhaps the French sense of elegance; and they are very deliberately learning. They can make things as solid and durable as the British, as light and convenient as the Americans; they build ships and engines and turn out cutlery as well as we can, they weave better; they make electrical and light automatic

machines as well as the Americans; and in the application of science, to which the future belongs, they easily beat both.

I conclude with a point which is, perhaps, not strictly or not immediately relevant. The Gospel of Ease has left one fatal legacy for which neither economic nor any other pressure offers a cure. I mean the declining national vitality. This is by far the most important question which my investigation has revealed. Beside it all others sink into insignificance. I intended to deal with it, and shall do so hereafter. Here I will merely say that such public references to it as I have seen reveal a totally inadequate conception of its importance and a misapprehension of the facts. It is not among the aristocracy or the bourgeois classes that the most rapid decline has taken place, as many suppose, but in purely industrial communities and among the pick of the industrial population. And it is a progressive evil, which promises slow national extinction. The only possible remedy I can see is ruralisation, not by garden cities or fancy experiments, but by fostering a real and large agricultural population, which can only be accomplished by peasant proprietorship or small holdings. The ownership of land, or at least its possession and control, is the only bait that will lure men from the town.

THE END

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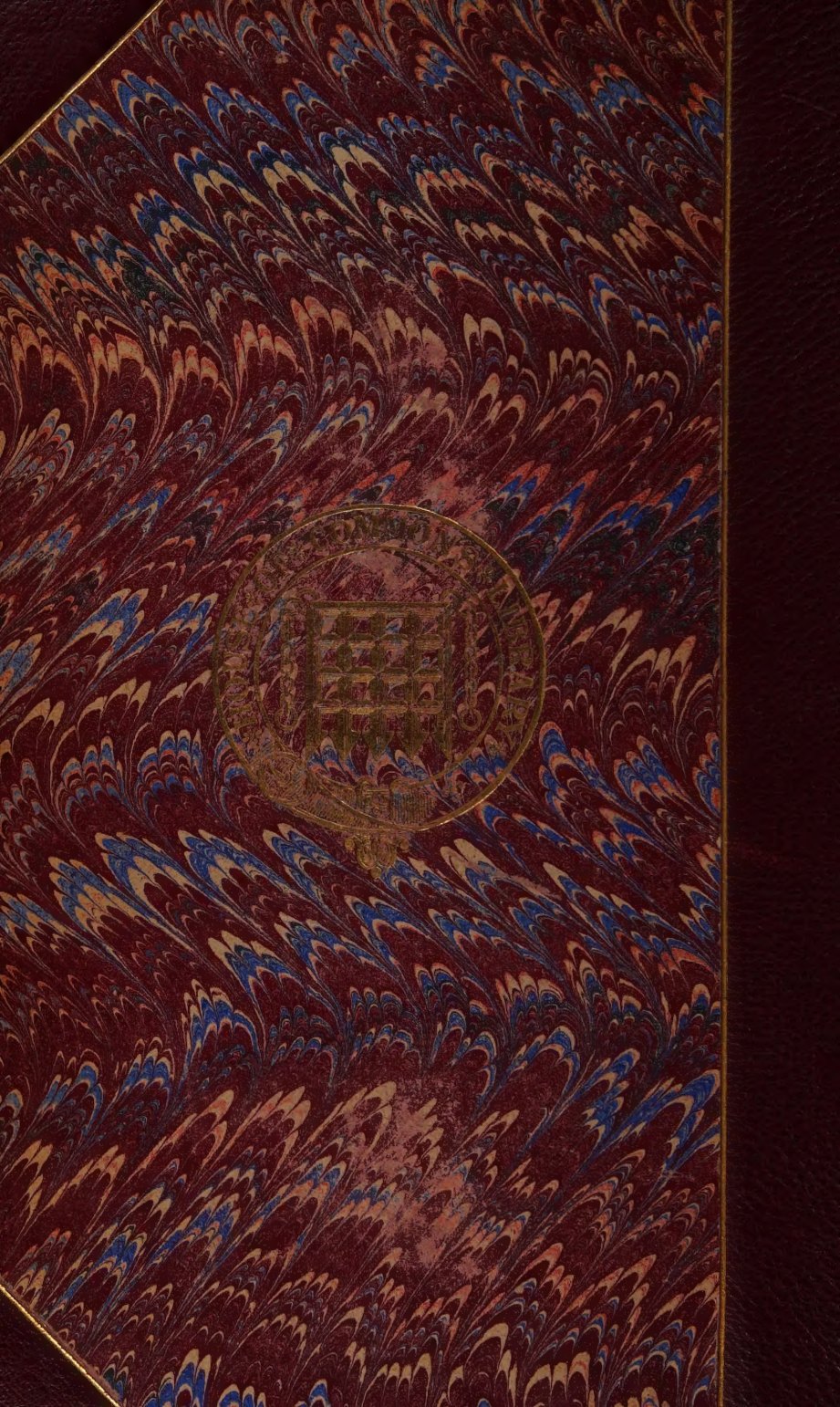
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